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On Matters of Feedback: Supporting the Online Grading Feedback Process with Web-Based, Collaborative Comment Banks

Jennifer Schneider

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On Matters of Feedback: Supporting the Online Grading Feedback Process with Web-
Based, Collaborative Comment Banks

by

Jennifer Schneider

Bachelor of Science
New York University Stern School of Business, 1992

Juris Doctorate
New York University School of Law, 1995

Master of Education
Western Governors University, 2017

Master of Science
Western Governors University, 2018

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College of Education

University of South Carolina

2020

Accepted by:

Yasha Jones Becton, Major Professor

Leigh D'Amico, Committee Member

Aisha Haynes, Committee Member

Suha Tamim, Committee Member

Cheryl L. Addy, Vice Provost and Dean of the Graduate School

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DEDICATION

Like most learning, this work originated from a series of questions, many with no ready answers. Thank you to all who have welcomed and encouraged my questions. I also dedicate this work to family, in its many forms, and the plethora of supportive communities of which I am lucky to be a part. To my school communities - students, instructors, learners, colleagues - you inspire me daily. I dedicate this work to learners everywhere and to anyone who receives and/or gives feedback. While my work may have originated in a place of disillusionment, this journey was supported by relentless optimism and positivity on the part of many. This work is dedicated to everyone who refuses to accept the status quo due to pressures of tradition, complicity, or fatigue. My own vision of feedback has transformed thanks to your input, collaboration, and support. An Ethiopian proverb reminds us that “If you pick up one end of a stick, you also pick up the other” (No Sweat Shakespeare, n.d.). So many have helped lift this stick and inspire positive change both in and out of classrooms. To all those who have so graciously and selflessly offered feedback on this work, thank you. I hope to always show others the same support, honesty, and encouragement. You make me deeply proud to have the great fortune and privilege to call myself an educator and your colleague. May your light always shine and may your lessons, learning, and teaching forever be bright.

“You are the sum total of everything you’ve ever seen, heard, eaten, smelled, been told, forgot - it’s all there. Everything influences each of us, and because of that I try to make sure that my experiences are positive.” - Maya Angelou

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innovate and for reminding me that design, individual needs and backgrounds, user experiences, and user interfaces are just as important, if not more so, as content. You have opened my eyes to the amazing synergies possible when education and technology partner in positive, personalized, and flexible ways. Each of you is a bright light and an inspiration. You constantly demonstrate the amazing power of curiosity and play on learning. Through your creativity, originality, problem-solving and troubleshooting power skills, commitment to excellence, and technical wizardry - you have taught me so much and helped this project become more than I ever dreamed it might be. You bring joy, light, and learning into every day and sustain my hopes and beliefs in a better tomorrow and future.

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“Nothing can dim the light which shines from within.” - Maya Angelou

ABSTRACT

This action research study describes how a web-based, feedback comment bank impacts online instructor efficacy as well as attitudes and perceptions associated with the online grading feedback process. Bandura's work on individual self-efficacy, Tschannen-Moran and Hoy's work on instructor efficacy, and Hattie's work on collective efficacy, along with Wiggins and Hattie and Clarke's work on grading feedback represent the core of the study's theoretical framework. The study adopted a mixed-methods action research design to examine three research questions: "How does the use of a web-based grading feedback comment bank impact online instructor's teaching efficacy?," "How does the use of a web-based grading feedback comment bank impact collective teacher efficacy within an online university?," and "How does the use of a web-based grading feedback comment bank impact online instructors' attitudes and perceptions of the grading process?" Study participants included 18 instructors at a private university that serves a global student population. Quantitative data was collected via pre- and post-intervention surveys. Qualitative data was collected via open-ended survey questions as well as through informal interviews, conversations, and document analysis. While study results indicated statistically significant changes in Educators' Sense of Online Teaching Efficacy and Online Grading Efficacy (evaluated on an exploratory basis only, given the study's small size), no statistically significant changes were observed in Collective Efficacy in Instructional Strategies. Analysis of qualitative data yielded eight emerging themes, including positive feelings, expanded visions of feedback, mitigation of

inconsistencies, increased personalization, efficiencies, appreciation for support, desire for collaboration, and desire for ongoing professional learning and personal development.

Keywords: online grading, feedback, online teaching, efficacy, instructor efficacy, collective efficacy, comments bank, feedback bank

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LIST OF ABBREVIATIONS

ESEOT..... Educator Sense of Efficacy for Online Teaching Scale

MNESEOT..... Michigan Nurse Educator Sense of Efficacy for Online Teaching Scale

TSES..... Teachers' Sense of Efficacy Scale

CHAPTER 1

INTRODUCTION

A fundamental and primary goal of all instructional experiences within the classroom setting, whether face to face or online, is student growth and learning. While there are many variations on what learning means, and no single, universally accepted definition, there are several guiding themes. Hattie (2013) defined learning as “the process of developing sufficient surface knowledge to then move to deep or conceptual understanding” (p. 26). For Lane (2015), learning is typically characterized as “a complex process (multidimensional) that requires effort, is frequently delayed, is contextual, and occurs only when relatively permanent changes in behavior result from reinforced practice” (p. 511). Irrespective of one’s adopted definition for the term, educators and researchers generally agree that learning should be a primary emphasis and focus of all instructional efforts and communications (Elkins, 2016). One especially important instructional effort is the provision of explanatory feedback on student work. Providing grades and associated feedback comments explaining a numerical or letter grade should similarly focus on student learning (Elkins, 2016). However, despite extensive research on instructional best practices, the acts of grading and providing students explanatory grading feedback have received comparatively less attention as other important factors and experiences influencing the student learning process (Elkins, 2016).

Closely related to grading, research suggests that feedback is one of the most critical factors in terms of how deeply students learn and grow. Hattie and Clarke (2019) suggested that feedback is specific information about a particular task that narrows or completes perceived gaps between what a performer should have understood and what the performer actually understood. Similarly, Nicol (2008) has written on the importance of quality feedback providing opportunities for learners to close existing gaps between current and desired performance levels. Importantly, students require feedback for both learning and positive learning experiences (Bajaj, Kaur, Arora, & Singh, 2018). Further, feedback helps students appreciate and understand what they have accomplished, what they have learned, and what else they need to do in order to achieve their learning goals (Bajaj et al., 2018). More generally, Bajaj et al. (2018) suggested that feedback guides students to narrow and ultimately eliminate gaps in skill and knowledge demonstrations.

Feedback often serves a variety of functions including error correction, positive reinforcement, and clarification of unwarranted assumptions and preconceived conceptions (Hattie & Clarke, 2019). Feedback can also serve to promote ongoing improvement, guide future performance, modify undesired behaviors, and praise positive actions (Hattie & Clarke, 2019). Notwithstanding feedback's many important functions, Hattie & Clarke (2019) have noted that, in reality, the ultimate impact of feedback often varies greatly. Despite the importance of feedback (and perhaps a consequence of its variability), the impact and associated consequences of feedback are often ambiguous and complicated (Vollmeyer & Rheinberg, 2005). The complexity of feedback's impact depends, in part, upon the timing and quality of the feedback, learner motivations and

desires, the consequences of learner performance, and the context in which the learning takes place (Vollmeyer & Rheinberg, 2005).

The importance and complexity of feedback persist with interesting nuances in the online learning environment. As the number of learners studying online grows, educators and researchers can look to online learning science as well as student performance and experience data to help inform pedagogy and feedback practices in the online classroom experience (Li, Marsh, & Rienties, 2016). Opportunities to strengthen and improve online teaching and instruction extend to and include the online grading feedback process.

Providing quality and impactful feedback is not without its challenges. A 2015 survey of almost 300 college students found that students received no feedback at all on a significant percentage of all assignment submissions (Elkins, 2016). Further, although students believed feedback was an important component of successfully achieving course and learning objectives, students often failed to understand how to apply general feedback comments received on one assignment to subsequent assignments (Elkins, 2016). Not only did the learning transfer pose challenges, but the motivation was also lacking. Students expressed a lack of motivation to apply the feedback that was not received in a timely manner and/or with sufficient clarity as to how it might be applied in the future (Elkins, 2016). Hattie, Fisher, and Frey (2016) have also written on the challenges of bias and the processing of feedback. Students are not unique in that they “seek feedback that boosts their self-image” and selectively focus on positive comments that are often non-actionable (Hattie, Fisher, & Frey, 2016, p. 17). Mandernach and Holbeck (2016) argued that with an increasing number of faculty trying to manage an

ever-increasing mix of responsibilities, it is now more important than ever to “work smarter, not harder” (p. 15). Rather than simply encouraging faculty to log on and demonstrate presence in their online classrooms, institutions must do more to offer faculty support as well as specific and actionable guidance and resources that can help optimize time spent providing online instruction (Mandernach & Holbeck, 2016). Relatedly, institutions should provide online faculty additional guidance and direction on how to augment and enhance the educational impact of their time spent instructing (Mandernach & Holbeck, 2016). Institutions should consider the online grading feedback experience as an explicit and critical component of online instruction.

Looking for ways to provide additional instructor and student support, more quality feedback, and grading efficiencies, scholars have explored a variety of options. Some have explored the use of feedback banks (sometimes referred to as comment banks, statement banks, or Turnitin Quickmarks; Bray, n.d.; Hornby, 2004). Others have explored electronic marking tools and the use of macros (Neal, 2013). Nicol (2010) has suggested that in addition to their own comments, students have access to all of the feedback comments provided for an individual assignment. In this way, students are encouraged to be both proactive and reflective as they evaluate and assess comments for relevance and applicability to their own work and learning (Nicol, 2008). Tools that incorporate statement banks have become increasingly prevalent within higher education (Denton & Rowe, 2014). Some scholars have developed comment banks for purchase and sharing (Moxley, n.d.). Google has also introduced a tool that provides comments to instructors (Schaffhauser, 2018). An early tester indicated that users found this feature “very useful” and that comments added to the bank could be “easily reused over and over

or edited to make feedback more personal” (Schaffhauser, 2018, p.1). A Google Docs Add-on called JoeZoo comes pre-loaded with 93 commonly used teacher comments (JoeZoo, 2018). GradeScope is another proprietary tool that provides additional options for streamlining the grading process (GradeScope, 2018). Another method that may be beneficial is an open, web-accessible resource that shares categories and examples of possible feedback comments. To date, there appears to be limited research that has explored whether such a resource might increase instructor teaching efficacy and/or improve instructor attitudes and perceptions of the grading feedback process.

Statement of the Problem

The problem addressed in this action research study involved the challenges online instructors and students encounter in connection with the grading feedback process. The researcher both taught in online learning environments and simultaneously served as a peer mentor and coach in the same online learning environments. In this role, the researcher observed online teachers who consistently shared their frustrations with unexpected time demands associated with large-classes and their limited ability to provide individualized and student-specific feedback on written assignments. The researcher would often experience similarly frustrations in her own teaching and learning experiences. At the same time, the researcher was often asked to review student complaints associated with a perceived lack of timely and detailed feedback in their courses. Instructors and students both experienced and shared persistent challenges that impacted self-efficacy and confidence in their abilities to achieve goals related to online learning and instruction. As noted, this was additionally reflected in the researcher’s own experiences.

A colleague described challenges associated with providing quality feedback as a quagmire. According to Merriam-Webster's Online Dictionary, the word quagmire means "a difficult, precarious, or entrapping position" (Quagmire, n.d.). This so-called feedback quagmire is a remarkably powerful component of the learning process. In general, instructor feedback is defined as personalized and constructive commentary on student coursework and class contributions (Morrison, 2013, p. 1). Chapman and King (2012) similarly described feedback as the written or verbal comments that are shared by an evaluator in response to student work and which are intended to motivate learners as well as share specific suggestions for revision and improvement. Many believe that feedback, when offered correctly, has the ability to transform a learner for the better. According to Professor John Hattie and his extensive research in the area, feedback ranks as one of the most important and influential factors in the learning process (2012a). Others have found, perhaps not surprisingly, that poorly delivered feedback can impact learners in negative ways. In a review exploring the effects of feedback through studies conducted between 1905 and 1995, Kluger and DeNisi (1996) found that in 38% of well-designed studies, feedback had a negative impact on performance.

The feedback quagmire is so real that even John Hattie has admitted to sometimes struggling to fully comprehend and grasp the true meaning of feedback as a concept (Wiggins, 2012). Given the complexities, it is no wonder that for many instructors, the most challenging and stressful part of teaching is the grading process (Tierney, 2013). There are questions of equity (distinct from equality) and bias in grading, as well. Research has consistently found that grading practices can vary, at times significantly, from school to school, program to program, and teacher to teacher (Feldman, 2018).

Tierney (2013) observed that while objectively unfair, most teachers would admit that grades fluctuate from day to day. For example, the majority of teachers would agree that a paper that received a B+ one day might receive a B, B-, or some other letter grade on another day (Tierney, 2013).

Over the past decade, online programs have become an increasingly common method of learning for an increasingly diverse population of students (Allen & Seaman, 2017; Ginder, Kelly-Reid, & Mann, 2019; Seaman, Allen, & Seaman, 2018). A recent study found that the number of students taking online courses has reached over 6 million nationally (Online Learning Consortium, 2017). Relatedly, the rate at which institutions of higher education rely upon adjunct instructors has been rising for some time. As of 2013, adjunct or contingent faculty accounted for approximately three-quarters of the teaching staff at U.S.-based non-profit colleges and universities (Kezar & Maxey, 2013). According to the American Association of University Professors, part-time adjunct professors account for over 50 percent of all college faculty (Glenn, 2016). Although U.S.-based universities are increasingly looking to adjuncts to teach students in their online programs, adjunct faculty typically have limited time in any given week and over the course of a semester to devote to their online teaching (Mueller, Mandernach & Sanderson, 2013).

Online learning growth has also introduced a variety of new and interesting challenges to the grading feedback process. For example, Hewett and Ehmann (2004) have suggested that “online instructors must work harder to develop “a rapport with” students and must begin “the [feedback] interaction with a friendly tone” (p. 78). Further, online courses “require more student writing than face-to-face classes, and, consequently,

instructors must respond to more writing as well” (Laflen & Smith, 2017, p. 41).

Associated issues of available time (and the increasing reliance upon adjunct instructors, as described above) can be compounded in the online, writing-intensive context. On the student side, Dowden, Pittaway, Yost, and McCarthy (2013) suggested that students’ possible emotional reactions to feedback are not fully or appropriately taken into account throughout the grading feedback process. Despite the challenges, there is no general consensus or clarity regarding the impact of the online instructional context on grading and/or how online instructors can most effectively and efficiently adapt grading best practices to the online environment (Laflen & Smith, 2017, p. 41.)

Research Questions

To further understand this problem of practice and how to improve online instructor efficacy as well as attitudes and perceptions associated with the grading feedback process, this action research mixed-methods study explored the following research questions:

Research Question 1: How does the use of a web-based grading feedback comment bank impact online instructor’s teaching efficacy?

Research Question 2: How does the use of a web-based grading feedback comment bank impact collective teacher efficacy within an online university?

Research Question 3: How does the use of a web-based grading feedback comment bank impact online instructors’ attitudes and perceptions of the grading process?

These research questions were designed to generate feedback and data on issues of instructor online teaching efficacy, collective teaching efficacy, and perceptions and attitudes surrounding the online grading feedback process.

Theoretical Framework

The theoretical framework that guided this research and its exploration of the online grading feedback process rested on a multi-part, interconnected analysis. In particular, the theoretical framework relied upon the work of efficacy, collective efficacy, and grading feedback theorists. Literature in these areas offered the framework by which the researcher evaluated the impact of a web-based, feedback comment bank on instructor online teaching efficacy, instructor collective efficacy, and instructor perspectives on online grading and online grading feedback. Each area is explored in more detail, below.

Self-Efficacy

Bandura (n.d.) wrote on an individual's beliefs in their efficacy to impact and influence events in their own lives as some of the most pervasive and most powerful mechanisms of human agency. Teacher efficacy describes a teacher's evaluation of his or her ability to achieve desired educational results, including for students who might lack motivation and/or demonstrate related barriers to learning (Tschannen-Moran & Hoy, 2001). Tschannen-Moran and Hoy (2001) wrote extensively on the ways teachers' beliefs about efficacy also influence and impact their classroom interactions, in both positive and negative ways. In general, instructors must first believe that they can influence the grading feedback process in positive ways in order to fully embrace and engage with the experience of sharing grading feedback with students.

Collective Efficacy

Collective teacher efficacy refers to teachers' collective beliefs that their work impacts students beyond the students themselves, their homes, and their communities (Tschannen-Moran & Barr, 2004). Related research and collective efficacy theorists also influenced this research study and the researcher's related thinking on the relationship between shared learning experiences and perceptions of instructional impact. Hattie (2012b) and other scholars have long highlighted the importance of collective teacher efficacy on student achievement, with Hattie suggesting that collective teacher efficacy is the single most important influence on student achievement (Visible-Learning, 2018). Research has also revealed that for many online instructors that majority of instructional time is spent both grading and providing grading feedback (Mandernach & Holbeck, 2016). Recognizing the time spent providing grading feedback on the part of instructors, it is critically important that instructors believe that these efforts are valuable and meaningfully support student achievement. In particular, it is important that all stakeholders in the feedback process, including the increasing number of instructors who work online and often in remote capacities, collectively believe in both their and their institution's potential to influence student outcomes in positive ways.

Impact and Characteristics of Quality Feedback

Finally, at the level of constructing, sharing, and receiving online feedback as a tangible construct, the work of Wiggins and Hattie also served as both a fundamental underpinning of this research and a critical influence on the author's thinking with respect to both the characteristic of, and need for, quality online grading feedback. Hattie and Clarke (2019) described feedback as not only an important and influential force, but

also one of the most variable of influences on student learning. While the characteristic of quality feedback include traits such as transparency, personalization, timeliness, and consistency (Wiggins, 2012), the reality is that the quality of provided feedback varies and can have both potentially positive as well as potentially negative influences and impacts (Hattie & Clarke, 2019).

Each element of this theoretical framework connected closely with key characteristics of the researcher's problem of practice and the online student and instructor experiences with the grading feedback process reflected therein. Scholarly work in these areas provided a unified framework through which the researcher studied the potential for a web-based, collaborative feedback comment bank to (a) support the efficient creation of personalized grading feedback as a tool for further learning and (b) positively impact online instructor efficacy and perspectives on grading in the online classroom setting.

Purpose of the Study

Recognizing both the value of helpful feedback and the simultaneous challenges of providing quality feedback, the researcher wondered about interventions that could support online instructors (referred to interchangeably as faculty and instructors throughout this paper) in providing quality student feedback in an efficient manner. This research study explored the impact of one such intervention on instructor online teacher efficacy (individual and collective) and instructor attitudes and perceptions of the online grading feedback process.

Dewey (1933) has written eloquently and persuasively on the importance of awareness and the teaching process. This study raised awareness about both challenges

and potential enhancements to the grading feedback process for online instructors. While some might argue the challenges of grading feedback are unavoidable, this study examined how administrators and schools can work to better support their online instructors, their experiences providing online grading feedback, and the online classrooms and students they lead.

Overview of Methodology

An action research design was used to explore the above-outlined research questions. Action research is defined as research for which data on a specific problem is collected, possible resolutions are explored, and ultimately results are assessed and evaluated (Tuncel & Icen, 2016). Relatedly, action research is a systematic inquiry undertaken by those vested in teaching and learning environments in order to develop, for themselves, a deeper understanding of the teaching and learning experience and associated challenges in an area of focus (Mills, 2018). The action researcher seeks to identify solutions to practical problems in need of resolution (Dana & Yendol-Hoppey, 2014). Typically, the action researcher examines his or her own practices, with the goal of developing a specific plan of action or solution to respond to an identified problem of practice (Mertler, 2017). Tested solutions can be implemented with minimal time delays and address, in unique and tailored ways, the problems exhibited by a particular instructor and student population (Boonchom, Nuchwana, & Amorn, 2012).

The research study utilized a mixed-methods research design. Efron and Ravid (2013) wrote that the “mixed-methods approach proposes to cross boundaries between worldviews and blend (or combine) qualitative and quantitative research methods and techniques into a single study” (p. 45). As Efron and Ravid (2013) explained, mixed-

methods research strives to draw upon the unique strengths of both qualitative and quantitative research in order to achieve desired goals. Using both qualitative and quantitative approaches in a single study helps the researchers understand multiple and distinct aspects of a particular research question (Creswell & Plano Clark, 2018).

This study combined both quantitative and qualitative research techniques in order to evaluate the impact of the availability and use of a web-based, collaborative feedback comment bank along with supporting professional development on instructor self and collective teacher efficacy as well as perceptions and attitudes associated with the online grading feedback process. Several strategies were used to collect qualitative data for this study. Specifically, open-ended questions obtained through self-administered survey questionnaires, informal interviews, conversations, and document analysis provided insights into feelings and reactions that online instructors associate with their instructional practices and online grading experiences. At the same time, quantitative data in the form of numerical data was collected from self-administered survey questionnaires. As Gay, Airasian, and Mills (2014) explain, multiple strategies yield different types of information and different data sources enhance the researcher's ability to evaluate, compare, and contrast collected information. Associated triangulation helps ensure research validity (Creswell & Plano Clark, 2018).

Study participants included online instructors at a large, private university that serves a global student population and has a primary, physical campus in the United States. Participants were instructors in the university's college of online and continuing education. Three were full-time faculty members. Four taught on a part-time, adjunct faculty member basis. Participants taught both graduate and undergraduate courses.

Undergraduate terms ran for 8 weeks. Graduate terms ran for 10 weeks. Participating instructors had been assigned sections of standard department courses to teach in a given session. All participating instructors had taught their assigned courses before.

In its initial form, the feedback comment bank included four broad categories of comments. The first category of feedback comments addressed written discussion board posts. The second category of comments focused on digital presentations. The third category of feedback comments addressed written assignments. Another category of comments addressed grammar and APA formatting requirements. Each category included a minimum of 100 initial comments (see Table 1.1). Initial comments addressed both content correction as well as feedback nuances regarding tone, bias, perspective, mindset, and other related qualitative feedback characteristics.

Table 1.1 *Initial Feedback Bank Content*

Discussion Board Posts	Written Assignments	Digital Presentations	Grammar & APA Format
Minimum of 100 initial feedback comments	Minimum of 100 initial feedback comments	Minimum of 100 initial feedback comments	Minimum of 100 initial feedback comments

The intervention was developed based on assignment expectations, available rubrics, and anticipated student questions. The comment bank's content was available for download in a variety of formats (including Google Documents, PDF, RemNote documents, and Word documents). Instructors had the option to download sets of comments for ease of use in grading feedback.

Google Suite tools (Sheets, Docs, Forms, and Sites) were used to host and grow the comment bank. A related website was developed to both host the bank and provide

easy access to users. The web-based spreadsheets and documents supported user comments and questions. The hosting site also included a library of professional development articles and research focused on grading feedback. Faculty were encouraged to share feedback, comments, and questions associated with the comment bank's form, content, design, and use. Users were invited to submit additional comments for inclusion in the bank. A linked Google Form invited comment submissions, by category. As feedback and input were received, the banks were continuously updated.

Participants received access to the intervention at the start of a teaching term and had ongoing access to the intervention throughout the term. A pre-term "Call for Participation" email invited faculty to participate in the study (see Appendix A). Interested faculty were invited to attend a 30-minute virtual professional development and training webinar on the importance of quality and timely online grading feedback. Prior to the start of the webinar, participating instructors completed an initial, pre-intervention survey (see Appendix B). At the conclusion of the initial professional development webinar, a link to feedback bank resources was provided (and emailed) to participants. Participants agreed to use the feedback bank throughout the term and to complete a post-intervention survey at the conclusion of the teaching term (the end of the 8-week term for undergraduate instructors and the conclusion the 10-week term for graduate instructors). Participants were also invited to attend a virtual 30-minute professional development and training webinar during week four of the term as well as a virtual 30-minute professional development webinar near the conclusion of the term (week eight of the term for graduate instructors and week seven for undergraduate instructors). Participants completed a brief, open-ended survey at the conclusion of each

virtual professional development webinar. The purpose of this action research study was to better understand how the described combination of professional development exercises and associated use of a web-based feedback bank might be used to improve the online grading feedback process experience and associated teaching efficacy for online instructors.

Researcher Positionality

Herr and Anderson (2015) wrote of the importance of researcher positionality for all research projects. Addressing positionality requires the researcher to reflect on the question of who the researcher is in relation to a study's participants and setting and to be constantly mindful of the "central dilemma unique to action researchers" and their associated relationship with their unique setting and participants (Herr & Anderson, 2015, p. 37). Given the variety of approaches and positions unique to the action researcher and his or her relationship to a study, "sorting out the implications of this unique relationship to one's study is often confusing" (Herr & Anderson, 2015, p. 37). The researcher's ongoing and evolving relationship to the problem of practice, the study participants, the study setting, and the study's research questions was no exception to this common experience.

In connection with this research, the researcher could be characterized as an insider in collaboration with other insiders. Throughout the entirety of the study the researcher acted not only as a researcher but, in her capacity as an online college instructor, peer coach, and mentor, also a practitioner. Online teaching and virtual peer mentorship and coaching occurred alongside and simultaneously with the associated research. Like the participants, the researcher served as an online faculty member (at the

same university as the participants) for the duration of the study. The researcher taught in the university's graduate division and criminal justice program. During this same period of time, the researcher also led a team of online faculty (all of whom taught in the university's STEM program) and was responsible for coaching and evaluating this team including with respect to the grading feedback provided to their online students. Several of the study participants taught online courses similar in content and/or structure to those taught by the researcher. Many did not. Throughout the entirety of the study, the practitioner-researcher worked closely in ongoing virtual collaboration with all instructor participants on the bank's development, implementation, and ongoing revision.

Ongoing reflection was used as a vehicle for maintaining a critical perspective and awareness of positionality throughout the study. Active and ongoing reflections helped ensure bias was reduced as much as possible. As noted, the researcher taught online courses similar in structure and form to those taught by participating faculty. In this role, the researcher needed to be aware of implicit biases that could present when comparing instructor feedback across courses. Similarly, the researcher actively monitored personal beliefs regarding what is "quality" or "meaningful" feedback based on personal experiences as a student and on personal interpretations of existing research and literature. The researcher's positionality also evolved overtime, as familiarity with participating instructor courses and the specific assessments employed in those courses increased. To address those concerns, the researcher incorporated an ongoing process of reflection and evaluation of both position and relationship to all study participants.

While the researcher teaches primarily graduate courses at the site university, study participants included both undergraduate and graduate instructors. When working

with faculty who teach students at different educational levels, the researcher might be considered an outsider, at least to some degree. However, because the researcher and the study participants all taught, in online capacities, for the same university and served a similar student population, it is the researcher's opinion that similarities were likely greater than differences. As such, the researcher identified primarily as an insider working with other insiders in terms of positionality. However, the researcher also aligned with positionality as an outsider at various points throughout such a study. For example, most of the study participants taught courses different than those taught by the researcher. Further, the researcher-practitioner had not previously worked with many of the study participants (and the undergraduate instructors, in particular). Although all participants taught in the criminal justice discipline, it is possible that given differences across undergraduate and graduate divisions, as well as different course objectives, student learning outcomes, and course assessments within graduate and/or undergraduate divisions as applicable, associated online teaching and online grading experiences could differ significantly.

It is important for a researcher to both reflect upon positionality as a continuum and to intentionally and actively consider where they might fall on the referenced continuum at each point in a study (Herr & Anderson, 2015). Relatedly, it is just as important to recognize that positionality often changes throughout the course of the research process (Herr & Anderson, 2015). That is, positionality is not static (and there are risks associated with viewing positionality in a static way). The researcher was no exception as, as the study and associated term progressed, the researcher's relationship with the participants did, as well. For example, professional development webinars and

informal conversations led to new types of relationships and interactions. Because the study took place over an extended period of time, relationships with participants whom the researcher did not know personally before the study commenced developed over time. Changes in relationships inevitably impacted the nature, extent, and content of all shared interactions and related positionality, as well.

Moreover, Herr and Anderson (2015) set forth varying positionalities (admittedly oversimplified categories) to include insider, insider in collaboration with other insiders, insider(s) in collaboration with outsiders, reciprocal collaboration, outsider(s) in collaboration with insider(s), and outsider(s) studying insider(s). It is also important to remember that “[t]here are other ways to think about positionality that are useful” (Herr & Anderson, 2015, p. 39). For example, Collins referred to an “*outsider within*” to capture the unique experience her race and gender permit (as cited by Herr & Anderson, 2015, p. 39). While the researcher identifies as female, study participants included 14 males and four females. For many of the informal conversations and virtual meetings, the researcher was the only female and, as such, could be considered an “*outsider within*” as described above.

Significance of the Study

Alsharif and Qi (2014) described teaching as an art form and an iterative, exploratory journey seeking a preferred combination of instructional tools, pedagogical strategies, and emerging technologies to maximize student learning. This research study extended this continuous journey to provide further insights into the practice of providing grading feedback. The study further explored the impact of the availability of and access to a web-based, collaborative comment bank on online instructor self and collective

efficacy and perceptions and attitudes of grading feedback and the online grading process. The study also provided opportunities to develop collaboration and communication skills. Specifically, the open-access and collaborative nature of the proposed intervention, as well as the associated professional development webinar activities, responded affirmatively to the Guiding Principles' suggestion for the provision of such opportunities (Carnegie Project on the Education Doctorate, n.d.).

Grading feedback, whether delivered in a face to face or online environment, is simultaneously characterized as one of the most important but most challenging aspects of teaching and education (Hattie, 2012a; Tierney, 2013). For many, online learning has become the new normal for education (Betts, 2017). Thus, as online learning continues to grow in popularity, both the online grading feedback process and instructor beliefs and perceptions associated with such process take on increasingly important significance (Allen & Seaman, 2017). Given the persistent challenges that surround the online grading process and the associated commonly held understanding of the importance of grading feedback on student growth and learning, it is imperative to find ways to better support online faculty, who are often faced with increasing class sizes, writing-intensive assignments, and limited time, in the grading feedback process.

By exploring the impact of previously unexplored interventions and grading supports, this study contributes to a deeper and more nuanced understanding of how the grading feedback process might be improved for online instructors and, as a corollary, their online students. Given the study's focus on feedback, a fundamental component of learning, the intended audience for this study included all stakeholders in the educational

experience. Interested parties included administrators, instructors, students, families, and potential employers.

Limitations of the Study

While the study was intended to generate knowledge, it is important to note that the intervention and the study results may not be generalizable and/or reproducible beyond the participating instructor population and assignment feedback focus. One such time constraint encompassed the length of the actual study. The research took place over a single, 8-week session for undergraduate instructors and a single, 10-week session for graduate instructors. Additionally, a convenience sample was utilized and consisted of online instructors at a large, private university. Participants were primarily part-time, online instructors teaching at a large, private non-profit university based in the United States. This convenience sample of participating online instructors may not have been representative of the larger instructor population.

Dissertation Overview

This section briefly describes the basic organization of this dissertation. Chapter 1 introduced the study and explained its context, relevance, and significance. Chapter 2 will provide the literature review and the theoretical framework for the research study. The discussion emphasizes existing literature on instructor teaching efficacy, instructor collective teaching efficacy, and grading feedback. Chapter 3 describes the study's mixed-methods methodology and related research design. It further details the study's data instruments and processes for collecting triangulated data. Chapter 4 provides an analysis of the collected data, including surveys, informal interviews, and document review. Finally, Chapter 5 shares a summary and discussion of the research and also

shares suggestions for future research and learning about how to improve the grading feedback process for both instructors and students.

Definition of Terms

This glossary of terms provides a list of important terms and constructs used in the study.

Collective teacher efficacy: The collective beliefs and perception that instructors in an educational institution make a difference in their students' educational experiences beyond the impact of the students, their homes, and their communities (Tschannen-Moran & Barr, 2004).

Efficacy: A belief in one's ability to influence events. Bandura describes an individual's belief in their efficacy to impact events in their lives as a central and driving component of human agency (Bandura, 1989).

Feedback: Chapman and King (2012) described feedback as the written or verbal comments an instructor shares with a learner. Feedback comments serve a variety of goals and functions, include to correct work, identify opportunities for improvement, motivate, and commend or praise student achievement (Chapman & King, 2012).

Instructor feedback: Constructive, specific, detailed information provided by an instructor in response to student work and/or class contributions (Morrison, 2013).

Self-efficacy: Self-efficacy describes the degree of confidence an individual has in his or her ability to achieve an identified goal (Hattie & Clarke, 2019).

Student self-efficacy: Student self-efficacy focuses on a student's beliefs regarding the likelihood of being able to perform a task or learn material and, importantly, accepting related responsibility for doing so (Bandura, 1997).

Teacher efficacy: Teacher efficacy refers to an instructor's beliefs regarding their ability to achieve desired educational results for all students, including those who might lack motivation and/or demonstrate other barriers to learning (Tschannen-Moran & Hoy, 2001).

CHAPTER 2

LITERATURE REVIEW

Overview of Study

The problem of practice examined in this action research study involved the challenges online instructors and students encountered in connection with the grading feedback process. Instructors and students alike expressed persistent challenges that impacted self-efficacy and confidence in their abilities to achieve instructional and learning goals. The researcher also experienced similar frustrations in both teaching and learning experiences.

Hattie (2012a) described feedback as one of the most salient and potentially most profound factors in an individual's learning process. However, for many instructors, the most difficult and frustrating part of teaching has been the grading feedback process (Nilson, 2015; Tierney, 2013). Beyond the practical challenges of time and utility, there have been concerns for equity and bias, as well. Research has consistently found that grading practices vary significantly from school to school, program to program, and teacher to teacher (Feldman, 2018; Kohn, 1999).

Online programs and online learning continue to soar in popularity (Seaman, Allen, & Seaman, 2018). Teaching and learning in online environments have introduced further complexities to the grading feedback process. Challenges include primarily text-based communications and larger class sizes (Crisp, 2007; Laflen & Smith, 2017; Nicol & Macfarlane-Dick, 2006). Despite the challenges, there exists little consensus for how

online instructors might most effectively approach the online grading process (Laflen & Smith, 2017). This research study sought to better understand this problem of practice and how to improve online instructor efficacy as well as attitudes and perceptions associated with the online grading feedback process.

Chapter Organization

This chapter provides a detailed review of the theory, research, and literature that served as both a framework and a guide for this research study. The theories and research described in this chapter frame both the identified problem of practice and the associated proposed intervention. This chapter is divided into seven primary sections, each of which summarizes and presents a major theme that guided this research study. Chapter sections include historical perspectives, theoretical framework, understanding assessment and grading, bias and equity concerns, online learning and higher education, efficacy in teaching, and online instruction and teaching challenges. Each element of the study's theoretical framework connected closely with key characteristics of the historical context for the researcher's problem of practice as well as online student and instructor experiences with the grading feedback process reflected therein. Scholarly work in these areas provided a unified framework through which the researcher studied the potential for a web-based, collaborative feedback comment bank to positively impact instructor's online teaching efficacy, online instructors' collective teacher efficacy, and perceptions of grading in the online classroom setting. A variety of reputable search engines and scholarly databases, including EBSCOhost, ERIC, ScienceDirect, and Taylor & Francis Online were relied upon for purposes of identifying, summarizing, and analyzing the

research explored in this chapter. Relied upon resources include peer reviewed journals, textbooks, and other scholarly writings.

Historical Perspectives

This section describes the historical perspectives that contextualize and underlie the study's identified problem of practice. The section also explores associated historical chains of thought, all as they relate to the study's problem of practice. Relevant perspectives and chains of thought focus on the connections and complex relationships between and among self-efficacy, instructor online teaching, online teaching efficacy, collective teacher efficacy, and the online grading feedback process.

Student assessment and associated reporting practices have been a fundamental component of educational practices for centuries (O'Connor, 2010). Grading and grading practices, in contrast, have a long but more recent history, dating back to the early 1900s (O'Connor, 2010). Nilson (2015) reminded readers that "grades did not always exist" (p. 1). In *A History of Grading*, Mark Durm (1993) provided both a history of grading as a process and as a form of potential discrimination. Durm (1993) described an unstandardized and persistently uncalibrated grading system where "[d]ifferentiating between students in the very earliest days of American colleges and universities seemed to center around social class" (p. 1).

A primary goal of all instructional experiences within the classroom setting, both face to face and online, is student growth and learning. One especially important instructional effort is the provision of explanatory feedback on student work. Feedback often serves a variety of functions including error correction, positive reinforcement, and clarification of unwarranted assumptions and preconceived conceptions (Hattie & Clarke,

2019). Notwithstanding feedback's many important functions, Hattie and Clarke (2019) have noted that, in reality, the ultimate impact of feedback often varies greatly. Despite the importance of feedback (and perhaps a consequence of its variability), the impact and associated consequences of feedback are often ambiguous and complicated (Vollmeyer & Rheinberg, 2005). The complexity of feedback's impact depends, in part, upon the timing and quality of the feedback, learner motivations and desires, the consequences of learner performance, and the context in which the learning takes place (Vollmeyer & Rheinberg, 2005).

Providing quality and impactful feedback is not without its challenges. Forsyth (2016) described providing students feedback as “psychologically, interpersonally, and procedurally complicated” (p. 182). Similarly, Nilson (2015) wrote on traditional grading as a process that bogs “down faculty with unnecessarily time-consuming and unpleasant work burdens” (p. 5). Research conducted by Elkins (2016) suggested feedback is often lacking or non-existent on student work. Further, students often fail to understand how to apply general feedback comments received on an assignment to subsequent assignments (Elkins, 2016). Students have also expressed a lack of motivation to apply feedback that was not received in a timely manner and/or with sufficient clarity as to how it might be applied in the future (Elkins, 2016).

The importance and complexity of feedback persist with interesting nuances in the online learning environment. As the number of learners studying online grows, educators and researchers can look to online learning science as well as student performance and experience data to help inform pedagogy and feedback practices in the online classroom experience (Li, Marsh, & Rienties, 2016). Mandernach and Holbeck

(2016) argued that with an increasing number of faculty trying to manage an ever-increasing mix of responsibilities, it is now more important than ever to “work smarter, not harder” (p. 15). Rather than simply encouraging faculty to log on and demonstrate presence in their online classrooms, institutions must do more to offer faculty support as well as specific and actionable guidance and resources that can help optimize time spent providing online instruction (Mandernach & Holbeck, 2016). Institutions should consider the online grading feedback experience as an explicit and critical component of online instruction.

Eager to explore opportunities to offer additional instructor and student support, more quality feedback, and grading efficiencies, researchers and practitioners alike have developed and tested a variety of tools and alternatives. Examples include feedback banks (also referred to as comment banks, statement banks, or Turnitin Quickmarks; Bray, n.d.; Hornby, 2004), electronic marking tools and macros (Neal, 2013), as well as curricular and instructional resources that incorporate statement and comment banks (Denton & Rowe, 2014; Moxley, n.d.; Schaffhauser, 2018). Justmote, for example, is a Chrome extension that enables audio feedback in Google Classrooms and G-Suite products and both simplifies and alleviates the time-intensive and often impersonal nature of virtual and/or remote feedback (Justmote, 2020). Another potentially useful approach resides in an open, web-accessible resource that hosts a variety of feedback comments and categories. Presently, limited research has evaluated how this type of resource might impact both individual and collective teaching efficacy and/or improve instructor attitudes and perceptions of the grading feedback process. The following sections sets

forth the theoretical framework that contextualizes and frames both the study's problem of practice and the proposed intervention.

Theoretical Framework

The theoretical framework that guided this research and the exploration of potential reforms to the online grading process rested on a multi-part and layered analysis. The theoretical framework drew upon the work of efficacy, collective efficacy, and grading feedback theorists. Scholarly work in these areas provided a framework through which the researcher studied the impact of a web-accessible, collaborative feedback comment bank on instructor online teaching efficacy, instructor collective efficacy, and perspectives on online grading and online grading feedback. The following sections explore each area in more detail.

Self-Efficacy

The research relied upon Bandura's research on self-efficacy. Bandura (n.d.) wrote that "[a]mong the mechanisms of human agency, none is more central or pervasive than people's beliefs in their efficacy to influence events that affect their lives" (para. 1). Student self-efficacy focuses on an individual's beliefs regarding the likelihood of being able to perform a task or learn material and, importantly, accepting related responsibility (Bandura, 1997). Relatedly, teacher efficacy has been defined as a teacher's evaluation of his or her ability to achieve desired educational results, including for students who might lack motivation and/or demonstrate related barriers to learning (Tschannen-Moran & Hoy, 2001). Tschannen-Moran and Hoy (2001) explained that teachers' beliefs about efficacy also influence and impact their classroom interactions. Specifically, efficacy has the potential to impact the extent of instructional efforts as well as associated

instructional goals (Tschannen-Moran & Hoy, 2001). Both students and instructors need to believe that they have influence in and over the grading feedback process, in order to fully embrace the feedback and related learning experience.

Collective Efficacy

Collective efficacy research also guided the researcher's thinking on the power of collaboration and shared learning experiences on the perception of instructional impact. Collective teacher efficacy refers to teachers' collective beliefs that their work has impact on their students beyond the students themselves, their individual homes, and their communities (Tschannen-Moran & Barr, 2004). Hattie (and others) have written on the importance of collective teacher efficacy on student achievement (Hattie, 2012b). Hattie has gone so far as to suggest that collective teacher efficacy is now the single most important influence on student achievement (Visible-Learning, 2018). Research has found that online instructors typically spend the majority of their time providing grading and feedback (Mandernach & Holbeck, 2016). It is important that instructors believe that this time is spent in a manner that meaningfully supports student achievement. Specifically, all stakeholders in the feedback process, including online instructors who often work in isolation and with little interaction with peers, need to collectively believe in their institution's potential to influence student outcomes.

Impact and Characteristics of Quality Feedback

Finally, at the core of this theoretical framework and at the level of constructing, sharing, and receiving online feedback as a tangible construct, the work of Wiggins and Hattie served as a basis for this research and, more broadly, the author's thinking on why high quality feedback matters and what constitutes valuable feedback. Hattie and Clarke

(2019) wrote extensively of feedback as an important and influential force, but also one of the most variable of influences on student growth and learning. Hattie and Clarke (2019) also wrote of the potentially positive as well as potentially negative influences of provided feedback. According to Wiggins (2012), “helpful feedback is goal-referenced; tangible and transparent; actionable; user-friendly (specific and personalized); timely; ongoing; and consistent” (para. 10).

Each element of this theoretical framework (see Figure 2.1) connected closely with key characteristics of the researcher’s problem of practice and the online student and instructor experiences with the grading feedback process reflected therein. Together and apart, scholarly work in each of these areas provided a unified framework through which the researcher studied the potential for an open, web-based feedback comment bank to (a) support the efficient creation of personalized grading feedback as a tool for further learning and (b) positively impact online instructor efficacy and perspectives on grading in the online classroom setting.



Figure 2.1 *Theoretical Framework*

Understanding Assessment and Grading Feedback

Assessment refers to the process of forming opinions and expressing judgments about how well student work aligns with designated standards (Boud & Associates, 2010; Christie et al., 2015). In educational contexts, assessment practices should help students identify and experience quality and personally meaningful learning experiences (Boud & Associates, 2010; Christie et al., 2015). Doing so is not without challenges. In a study evaluating preferred tools for writing assessment, Alshakhi (2019), citing White (1985), noted that “there are more problems than agreement in assessment. What works at one time could be proven problematic at a different time” (p. 180). That is, just like “[e]very rubric has advantages and disadvantages depending on the context, goals of the program, curriculum, and students’ level of writing”, there is not necessarily any one optimal assessment tool or feedback strategy for all contexts (Alshakhi, 2019, p. 180). Similarly, Christie et al. (2015) argued that educators and institutions “need to rethink and renew the tools they use to assess learning if they are to be a help to learning rather than a hindrance” (pp. 25-26). Clearly, the grading and assessment process is complex, important to learning, and worthy of careful analysis.

Chapman and King (2012) described feedback as the written or verbal comments an instructor shares with a learner. Feedback comments serve a variety of goals and functions, include to correct work, identify opportunities for improvement, motivate, and commend or praise student achievement (Chapman & King, 2012). Instructor feedback refers to the constructive, specific, detailed information provided by an instructor in response to student work and/or class contributions (Morrison, 2013). Feedback is often broken down into two categories: evaluative and descriptive feedback (Schinske &

Tanner, 2014). Evaluative feedback, such as a letter grade or a comment that praises or critique student work, judges student work whereas descriptive feedback shares substantive information that explores how a student can increase competence in connection with the subject matter under review (Brookhart, 2008; Schinske & Tanner, 2014). Descriptive, written feedback has the potential to improve student performance on problem-solving tasks (Schinske & Tanner, 2014). Relatedly, Hattie and Timperley (2007) defined feedback as an action by an agent (for example, an instructor) that offers specific information associated with one's performance (Hattie & Clarke, 2019). Irrespective of who delivers the feedback, it can be thought of as information relating to a specific task and that strives to fill a gap between what is currently understood and what is desired to be understood (Evans, 2013; Hattie & Clarke, 2019).

Feedback and Impact

The information shared in response to a specific task and intended to fill a gap between current and desired knowledge—what is commonly called feedback—is, indeed, extremely important. In fact, many argue that feedback is one of the single most powerful influences on how, and whether, students learn (Black & William, 1998; Denton & McIlroy, 2018; Hattie, 2012a; Hattie, 2012b; Hattie & Timperley, 2007). Hattie's (2012) work included a synthesis of more than 900 meta-analyses that demonstrated how feedback yields one of the highest effects on student learning. Similarly, Laurillard (2002) has argued that taking action without receiving associated feedback results in a completely unproductive learning experience for students. In sum, for many educational researchers, feedback on student performance is respected and “viewed as one of the most influential and effective learning paradigms” (Zimbardi et al., 2017, p. 1).

Characteristics of Quality Feedback

In order to support learning in the ways research suggests that feedback (and only feedback) can, feedback must be of a certain quality and nature. While the phrasing differs depending upon the researcher-writer, in general, quality, effective feedback is specific, timely, goal-oriented, shared clearly for the purpose of personal growth, and intentionally involves learners in the process (Stenger, 2014). Brown, Bull, and Pendlebury (1997) wrote that effective feedback is timely, relevant to the recipient, and encouraging. To be effective, feedback must also include realistic suggestions for student improvement (Brown, Bull, & Pendlebury, 1997). Wiggins (2012) described helpful feedback as actionable (and goal-referenced), specific, personalized, timely, ongoing, consistent, and transparent. The following sections explores related elements and characteristics of quality feedback in more detail.

Detailed and Specific. Greene (2018) suggested that feedback should be detailed and “highly informative rather than controlling or only evaluative (as in good, poor, etc.)” (p. 65). Specifically, students must understand both where they performed well and what they need to correct (Greene, 2018; Wiggins, 2012). An instructor must intentionally direct and focus student attention to both improvements in knowledge and skills, as well as ongoing opportunities to continue to do better (Greene, 2018; Marzano, Pickering, & Pollack, 2001). In sum, quality feedback must be targeted, balanced, and richly descriptive in order to help students achieve their learning goals.

Multi-Directional and Active. Research also suggests avoiding a one-directional approach to feedback (Delva et al., 2013; Laurillard, 2002; Nicol & Macfarlane-Dick, 2006). Rather, feedback should create additional opportunities for connections and related learning. Nicol and Macfarlane-Dick (2006) argued that an effective feedback process requires the promotion of self-regulated learning, including, for example, student reflection and self-assessment opportunities, and an associated approach to assessment that encourages and support students' active engagement with instructor provided feedback. Further, Hattie and Clarke (2019) have suggested that the most powerful types of feedback (the kinds that makes learning visible) are from students to teachers. Specifically, when students are able to identify what they know, where they have made errors, and where they do not understand, teaching and learning synchronize is powerful and effective ways (Hattie & Clarke, 2019; Wiggins, 2012).

Personalized, Supportive, and Responsive. Quality feedback is also personalized and student specific (Elkins, 2016; Marzano, Pickering, & Pollack, 2001; Wiggins, 2012). Feedback must respond to unique student needs, support students' growth mindsets, and instill a sense of potential, rather than failure. Bain (2004), citing an article by Claude Steele, reminded readers that students come from a wide variety of backgrounds that are far too complex to describe in any one single way (p. 96). Feedback needs to vary, too. Chapman and King (2012) wrote of the importance that students know an instructor is continuously monitoring both their strengths as well as opportunities to support their growth both cognitively and affectively.

Timely, Relevant, and Actionable. Effective feedback is also timely and actionable (Brown, Bull, & Pendlebury, 1997; Elkins, 2016; Wiggins, 2012). Marzano,

Pickering, and Pollack (2001) suggested that when students receive corrective feedback in a timely manner they have the greatest potential to improve. In general, the sooner students receive feedback, the better (Irons, 2008; Thomas & Oliver, 2017; Wiggins, 2012). Feedback delivered as close in time as possible to the associated learning event is optimal (Anderson, 2008). Morrison (2013) explained that prompt feedback helps students assess their existing knowledge and identify next steps for further improvement. Importantly, students also benefit most from feedback that is received while it still matters and before they need to submit a subsequent, related assignment (Gibbs, 2010).

Grading Feedback Challenges

However, providing quality grading feedback is not without challenges and debate. Scholars, educators, and practitioners agree that questions of feedback are both challenging and highly contentious throughout most, if not all, of higher education (Boud & Molloy, 2013; Nilson, 2015). Others have written of evidence that “suggests that feedback practices in higher education are often not to an adequate standard” (Thomas & Oliver, 2017, p. 39). The related issues of grading poses “a controversial and emotional topic in many ways” (Chapman & King, 2012, p. 127). Despite, or perhaps in spite of, its value for learning, feedback persists as an unresolved and complicated issue in higher education (Nicol, Thomson, & Breslin, 2014; Denton & McIlroy, 2018).

Hattie and Clarke (2019) wrote extensively of feedback as an important and influential force, but also one of the most variable of influences on student growth and learning. Hattie and Clarke (2019) wrote also of the potentially positive as well as potentially negative influences of provided feedback. Challenges associated with providing timely, actionable, individualized, and supportive grading feedback persist for

both instructors and students. The following sections explore several of these challenges in more detail.

Stress and Time. The time intensive nature of effective grading feedback, combined with the increasingly limited available instructor time to grade pose a variety of feedback related challenges (Arter & McTighe, 2001; Nilson, 2015; Staats, 2005; Tierney, 2013, Wiggins, 2012). For example, in programming courses, Xue, Ola, Akkaladevi, and Yingjin (2016) noted that given the time intensive nature of grading programming assignments, instructors often assigned fewer than the ideal number of programming labs. Grading fatigue is related and an ongoing concern, with accompanying issues of fairness and consistency (Tierney, 2013). Nilson (2015) wrote that “[w]hat the faculty reap for their endless hours of grading are more grading protests and conflicts with students than ever before” (p. 6). Stress and stressful environments are also contributing factors to the presence of implicit biases (Staats, Capatosto, Tenney, & Mamo, 2017). Greene (2018) wrote on the importance of feedback and simultaneously describes the challenges in providing meaningful feedback to students when confronting the common task of having many papers to grade.

In 1993, Angelo and Cross identified time as “faculty’s most precious resource” (p. 378). Limited time is another ongoing and persistent challenge that continuously (and currently) poses opportunity costs for instructors (Angelo & Cross, 1993). In some contexts, “the demands of grading require so much instructor attention, little time remains for reflection on the structure of a course or for aspirations of pedagogical improvement” (Schinske & Tanner, 2014, p. 165). Relatedly, the time and stress that often accompanies the grading process can distract instructors from other, equally important components of

teaching and learning (Nilson, 2015; Schinske & Tanner, 2014). Time spent grading, for example, is often identified as a significant barrier to innovation in classroom instructional strategies (Schinske & Tanner, 2014).

Poor Quality and Time Delays. Issues of intensive grading time and timing are concerning, in part, because research suggests that the immediacy, ongoing nature, and individualization of feedback is closely linked to student learning (Hattie & Clarke, 2019; Swan, 2003; Wiggins, 2012). In a large-scale survey conducted by the National Union of Students (2012), two-thirds of UK undergraduates shared that they typically wait over 2 weeks to receive feedback (Denton & Rowe, 2014). In a 2014 National Research Report conducted by Noel-Levitz, findings of a student satisfaction survey (completed between the fall of 2011 and the spring of 2014) of approximately 600,000 students nationwide revealed that almost half of all students at 4-year institutions desire less bias and more timely feedback from instructors (Noel-Levitz, 2014).

Aside from issues of timing, there are associated concerns with clarity. In a study by Price et al. (2010), students shared dissatisfaction with feedback that was ambiguous and that did not include exemplars or other examples that modeled desired work (Denton, 2015). Research has found widespread agreement that instructor feedback comments, even those delivered in a timely and descriptive manner, are often quite challenging for students to interpret and later convert into improved performance in the future (Schinske & Tanner, 2014; Weaver, 2006).

Confusion and Conflicting Guidance on Praise and Content. There are also conflicting views related to optimal feedback content and tone (Dweck, 2008; Elkins, 2016). For example, questions of the impact of praise in feedback remain unclear.

Whereas, Chapman, and King (2012) wrote that “specific observable praise statements are motivating factors in the feedback process” (p. 4). Hattie and Clarke (2019) suggested that feedback about the learning and praise should not be mixed in order to avoid message dilution. Lipnevich and Smith (2008) noted that students often recall praise although it is rarely rated as effective for improving performance. Hattie and Clarke (2019), citing Skipper and Douglass (2012), wrote that when compared to feedback with no praise, students in praise conditions showed a more negative response to a single failure such as a poorly executed assignment. Similarly, Hattie and Clarke (2019) referred to a meta-analysis conducted by Ryan, Mims, and Koestner in 1983 to demonstrate that praise is often ineffective when given to encourage desired behavior. For example, Ryan, Mims, and Koestner (1983) found a negative impact of phrase associated with factors over which students have little control. The content of feedback messages is complex and not without important and sometimes counterintuitive implications.

Limited Support and Clarity Regarding Perceptions of Process. Beyond issues of timing, tone, and content, there are also challenges associated with process (Hattie & Clarke, 2019; Schinske & Tanner, 2014; Tierney, 2013). In reality, many instructors approach grading as a process that is separate and distinct from teaching and learning (Schinske & Tanner, 2014). In order to bridge the divide between perception of process and the powerful teaching value of grading feedback, instructors need tools that support and explain the feedback process. For example, Boud and Associates (2010) point out that instructors need specific and detailed information in order to show students what they have done well or not, and how their work could be better. Such information might take a variety of forms, including supporting resources and/or additional training.

Limited Student Use. Research has found that students often fail to read written feedback—when provided (Crisp, 2007; Hounsell, 2007; MacDonald, 1991; Sinclair & Cleland, 2007; Withey, 2013). Additionally, even when students do read and review their feedback, the feedback is often written in ways that students do not find helpful in connection with improving their work (Higgins et al., 2002; Withey, 2013). Jonsson (2013) identified five reasons why students might not use feedback, including a lack of usefulness, insufficient personalization, an excessively authoritative tone, a dearth of strategies to use and/or apply the feedback, and/or limited understanding of the terminology used in the feedback.

Scholars describe a so-called feedback paradox, whereby students clearly recognize the importance of feedback for learning, yet also make limited use of the feedback they receive (Brown & Glover, 2006; Denton & McIlroy, 2018; Withey, 2013). Clearly, the quality of provided feedback influences the quality of student engagement with it (Withey, 2013). In one study, Orsmond and Merry (2011) found that relatively few of the reviewed written feedback comments were designed to encourage active engagement, critical thinking, and opportunities for future applications and improvement. Winstone, Nash, Rowntree, and Parker (2017) explained that it is easy to understand why students might fail to review and engage with feedback that has little development value.

Global Challenges. In universities abroad, global teacher shortages are presenting related challenges providing quality feedback in light of increasing class sizes and limited available time (Unesco, 2017). Leach (2014) has suggested that rapid and expanding enrollments have led to declines in teaching excellence and the recruitment of less qualified instructors. Relatedly, even for experienced but non-native English-

speaking instructors teaching in English only classrooms abroad, it can be a struggle to provide writing and grammar feedback on student work (Leach, 2014). Instructors worldwide face challenges providing quality grading feedback to students.

Given the challenges, it is no wonder that for many, the most difficult and most stressful part of teaching remains grading and providing quality feedback on student work (Hyland & Anan, 2006; Nilson, 2015; Tierney, 2013). Concerns extend beyond timing and content, to issues of bias and equity, as well. The next section explores these concerns in more detail.

Bias and Equity Concerns

Of course, equitable assessment is an important goal that is shared by both students and educators (Brennan, 2008; Malouff, Stein, Bothma, Coulter & Emmerton, 2014). However, there are persistent questions, and associated challenges, of equity and bias in grading (Schinske & Tanner, 2014; van Ewijk, 2011). A few examples follow: Are all students provided personalized feedback? Is feedback shared equitably across all students? Is scoring completed in a fair and impartial manner? Do instructor biases (implicit or otherwise) impact the way student work is scored? Is feedback motivating? Does feedback support or hinder student efficacy? The following sections explore related concerns and challenges, more fully.

Subjectivity

Many commentators have criticized grading as a subjective and inconsistent evaluation process, where an individual student can, and often does, receive dramatically different grades and feedback for the same work, depending upon the time and place of grading and the identity of the grader (Schinske & Tanner, 2014; van Ewijk, 2011).

Tierney (2013) wrote that “[a]n essay that earns a B+ at one moment might earn a B- the next day. It shouldn’t be that way, but any honest teacher will admit it’s true” (p. 2).

Challenges in grading reliability have been seen throughout higher education environments (Meadows & Billington, 2005; Schinske & Tanner, 2014). In one classic study where 53 professionals were asked to grade 300 freshman essays using a 1-9 scale, not a single essay received fewer than five different grades (Diederich, 1974; Joyce & Joyce, 2017). Further, as researchers for the Academic Senate for California Community Colleges acknowledged, everyone suffers stress and additional tension when an instructor, department, or institution develops a reputation for either less or more rigor in grading than another (Walton et al, 2008).

The variety of factors impacting the consistency and reliability of grading are broad and far-reaching. Traits and author characteristics such as penmanship (Bull & Stevens, 1979), sex (Spear, 1984), ethnicity (Fajardo, 1985), likeability (Cardy & Dobbins, 1986), and attractiveness (Bull & Stevens, 1979; Landy & Sigall, 1974) all have the potential to impact the way an instructor interacts with and scores student work (Schinske & Tanner, 2014). Instructor experience levels (Weigle, 1999) and the order in which student papers are scored (Farrell & Gilbert, 1960; Spear, 1996) can also impact an instructors’ grading and feedback process (Schinske & Tanner, 2014). van Ewijk (2011), citing earlier studies, highlights a range of factors, including group stereotypes, student attractiveness, and interpersonal relationships, that may influence instructor grading. For example, studies have also identified variations in scoring and evaluation based on name (i.e., first and surname; Erwin & Caley, 1984; Lebuda & Karowski, 2013). Further, earlier research suggests “that biases in teachers’ grading practices may harm certain

groups of students, depending on their sex, ethnicity, or socio-economic status” (van Ewijk, 2011, p. 1).

Arter and McTighe (2001) wrote of doubts common to all teachers. For example, teachers are often asked to assess and score criteria for which they are not comfortable. Further, questions such as “Maybe I’m not being consistent between students” and/or “Maybe Mrs. Jones next door wouldn’t agree with my grades” are common (Arter & McTighe, 2001, p. 9). For many teachers, notions of what constitutes quality critical thinking and/or problem-solving skills, for example, are “not as crystal clear as your notion of what you like in a restaurant or other things in daily life” (Arter & McTighe, 2001, p. 10). However, educators are constantly asked to assess and provide feedback to students on things such as critical thinking, for example (Arter & McTighe, 2001). Similarly, not every student needs the same feedback. Rather, for equitable feedback each student requires feedback that will support that individual student’s success.

Implicit and Explicit Biases

However, even well-intentioned individuals have biases that impact their actions, can promote discriminatory behaviors, and can hinder the desire to provide feedback in personalized and equitable ways (Fridell, 2017). Biases associated with grading raise issues of equity, where some students are unfairly harmed (Malouff et al., 2014). As an example, Dee (2004) found that students of ethnic minorities received lower test scores when their teacher belonged to the ethnic majority than when their teacher belonged to the students’ ethnic group. However, van Ewijk (2011) noted that Dee’s (2004) research did not determine whether the noted differences were a result of biased grading and/or some other factors.

Research has identified situations involving incomplete information, time constraints, and fatigue as those especially susceptible to implicit bias (Staats, 2016). Staats (2016) wrote that “[g]iven that teachers encounter many, if not all, of these conditions through the course of a school day, it is unsurprising that implicit biases may be contributing to teachers’ actions and decisions” (p. 30), including grading feedback. Harber et al. (2012) noted the challenges instructors, having to balance assertiveness with respect for students, face when providing feedback. According to Harber et al. (2012), raising the issue of race can promote concerns for a lack of racial sensitivity on the part of instructors. This alone, according to Harber et al. (2012), can result in a positive bias. A 2015 study found that White teachers who lecture black students appeared more nervous and, as a result, suffered in terms of their lesson quality (Jacoby-Senghor, Sinclair, & Shelton, 2015).

A 2014 study evaluated how confirmation bias can unconsciously impact the evaluation of reviewed work. Confirmation bias refers generally to mental shortcuts that support the active seeking of information that affirms pre-existing beliefs (Reeves, 2014). Researchers designed a fictitious legal memo that contained almost two dozen intentional spelling, grammar, analytical, and technical writing errors. Identical memos were shared with law firm partners for evaluation. For those memos with an author that was identified as African American, reviewers found more of the embedded errors and rated the memo as lower quality than for memos where the author was identified as white (Reeves, 2014). In this study, Reeves (2014) confirmed an initial hypothesis that unconscious confirmation bias in a supervising lawyer’s assessment of legal writing would result in a more negative rating if that writing was submitted by an African American lawyer in

comparison to the same submission by a white lawyer. That is, despite an intention to be unbiased, we often find more errors when we expect to see them. Relatedly, individuals often see less errors when we do not expect to see them (Reeves, 2014). Although this study focused on the evaluation of a legal memo, “it is not a stretch of the imagination to consider the activation of this implicit dynamic in grading student essays or evaluating other forms of subjective student performance” (Staats, 2016, p. 31).

Studies have also found evaluative biases against a wide range of students, including female students (Spear, 1984), male students (Martin, 1972), black students (Piche', Michellin, Rubin, & Sullivan, 1977), and white students (Fajardo, 1985; Malouff, Stein, Bothma, Coulter, & Emmerton, 2014). Similarly, researchers have identified biases in pre-service teachers and their evaluation of students with migrant backgrounds (Bonefeld & Dickhäuser, 2018).

Impact on Students

The ways students perceive instructor grading standards and processes are also not without impact. These perceptions can impact student motivation levels, confidence, and even long-term school-related outcomes (Betts & Grogger, 2003; Figlio & Lucas, 2004; Nilson, 2015; van Ewijk, 2011). Linvill (2019) explained that poorly constructed feedback can damage instructor-student relationships and student self-image. Research suggests that instructors and students do not necessarily view grading from similar perspectives. Whereas instructors tend to think of grades and grading feedback as measures of mastery and motivational tools, students think of grades and feedback as measures not only of mastery, but also self-esteem, self-worth, and future employment and educational opportunities (Edgar, Johnson, Graham, & Dixon, 2014). Related

research also suggests students, especially minority students, may not invest efforts and engage with feedback in situations in which they feel as if they might be subject to biased treatment (Yeager et al., 2014). Further, Feldman (2019) wrote that “using low grades as punishment doesn’t motivate students; it erodes their motivation” (p. 164). Perhaps this is why Kohn (1999) argued that “the most impressive teachers are those who despise the whole process of giving grades. Their aversion, as it turns out, is supported by solid evidence that raises questions about the very idea of traditional grading” (par. 2).

Strategies and Support

The signals sent through grading feedback are powerful and often support student success. However, at times these same signals can (often unknowingly) serve to reinforce and/or hinder student motivation, achievement, and sense of belonging. Dewey has written eloquently and persuasively on the importance of awareness and the teaching process (Dewey, 1933). It is important to both raise awareness of the associated ethical and equity issues and provide practical tools and strategies for addressing them.

In addition to highlighting and revealing the presence of bias, research also suggests strategies to reduce bias in educational practices. A common theme across many of the recommended strategies include additional support for instructors (Harber et al., 2012). For example, research has found that instructors enjoying strong organizational support were less like to provide false praise when evaluating the work of their black students (Harber et al., 2012). Additionally, Millet (2018) has suggested that providing instructors information regarding the leniency of their grading as compared with that of their peers can lead to reductions in grading leniency variability.

Reevaluating the Utility of Grading Feedback

Given the many practical and equity-related challenges, and despite the findings on the potentially powerful impact of feedback, scholars have long questioned the utility of feedback more generally (Balcazar, Hopkins, & Suarez, 1985; Fisher & Taylor, 1979; Latham & Locke, 1991; Salmoni, Schmidt, & Walter, 1984; as cited in Kluger and DeNisi, 1996). More recently, Carless, Salter, Yang, and Lam (2011) have argued that “tinkering with feedback elements, such as timing and detail, is likely to be insufficient” (p. 396). Rather, “a more fundamental reconceptualization of the feedback process” is needed (Carless et al., 2011, p. 396). A reconceptualization of feedback is indeed needed, even more so given ongoing research that suggests “that feedback has rightly become a focus of teaching research and practice” (Wisniewski, Zierer, & Hattie, 2020, p. 1).

Others have found, perhaps not surprisingly, that poorly delivered feedback can impact learners in negative ways. In a review exploring the effects of feedback through studies conducted between 1905 and 1995, Kluger and DeNisi (1996) found that in 38% of well-designed studies, feedback had a negative impact on performance. Specifically, Kluger and DeNisi (1996) identified feedback interventions (FIs) that “produced negative - but largely ignored - effects on performance” (p. 1). In this study, Kluger and DeNisi (1996) conducted a meta-analysis (607 effect sizes; 23,663 observations) that suggested FIs improved performance on average ($d = .41$) but that over 1/3 of reviewed FIs decreased performance. Relatedly, in a literature review, Canning (n.d.) summarized a variety of common concerns that have established feedback as a “particularly problematic area” (p. 1). Canning’s research highlights quality deficits and challenges associated with instructors providing feedback which a student does not understand or does not know

how to use (Canning, n.d.). Canning further highlights challenges associated with feedback that lacks relevance, feedback that lacks timeliness, feedback that is not meaningful to students, and feedback which does not offer suggestions for improvement (Canning, n.d.).

Online Learning and Higher Education Trends

Challenges with grading the feedback process are not limited to traditional brick and mortar classrooms. Similar challenges present, often in compounded ways, in increasingly popular and growing online learning programs (Allen & Seaman, 2017; Seaman, Allen, & Seaman, 2018). As of Fall 2017, there were over 3.1 million students enrolled in fully online educational programs (Gallagher, 2019). Another study found that the number of students taking online courses has reached over six million nationally (Online Learning Consortium, 2017). Across the United States and worldwide, higher education institutions are increasingly expanding their online programs (Horvitz, Beach, Anderson & Xia, 2015). Correspondingly, the number of instructors teaching online continues to rise (Horvitz et al., 2015). Both by choice and out of necessity as a result of COVID-19 and associated restrictions on face to face learning, online learning has been, and will continue to be, increasing at exponential rates (Digital Promise, 2020).

Relatedly, the rate at which institutions of higher education rely upon adjunct instructors has been rising for some time (Rudick & Dannels, 2019). According to the American Association of University Professors, part-time adjunct professors account for over 50% of all college faculty (Glenn, 2016). According to Kezar and Maxey (2013) and Reavy and Deason (2014), non-tenure-track (NTT) faculty (often referred to as

adjunct or contingent faculty) account for approximately three-quarters of all teaching faculty at non-profit colleges and universities in the United States.

Whereas U.S.-based universities increasingly rely upon adjuncts and other contingent faculty to instruct online students, these faculty, many if not most of whom hold multiple and sometimes full-time positions, have finite amounts of time and energy each day, week, and term to devote to their online teaching (Mueller, Mandernach & Sanderson, 2013). Additionally, most NTT teaching assignments are contingent, depending upon enrollments and funding. The majority of NTT instructor are hired by course or term, with no guarantee of consistent teaching assignments (Reavy & Deason, 2014). The contingent nature of these teaching assignments “are likely to produce unique stressors and possibly negative health effects (Reavy & Deason, 2014, p. 1). Such instructors might have less time, energy, and/or motivation to invest fully in the instructional and grading process. Training may also be inconsistent.

While average class sizes vary by program and institution, research suggests that the national average class size in an online course is 14 to 1 (D’Orio, 2017; Ohio State University, 2017). In the researcher’s own experiences, class sizes are significantly greater. As noted by Rawle, Thuna, Zhao, and Kaler (2018), “[l]arge courses are a reality of the current university environment” (p. 1). However, larger class sizes have significant implications on the feedback process. For example, when Nancy Traver, an adjunct professor in Columbia University’s Journalism Department, had a class of 16 students, she shared that “increasing its size would make it more difficult for her to grade and give feedback on every assignment. Reducing the number of assignments given to students, however, would compromise the quality of their education” (Campus Editor, 2015).

Despite trends with universities increasingly relying upon adjuncts to teach students in online programs, “adjunct faculty may simply have less time available to invest in the online classroom” (Mueller, Mandernach & Sanderson, 2013, para. 24). According to Shiffman, “the majority of adjunct faculty teach as a supplement to their regular, full-time employment” (as cited in Mueller et al., 2013, p. 2.). Additionally, online adjunct faculty “may not receive sufficient planning time between the time a course contract is issued and the start of a course. . . . This decrease in course preparation time may also negatively impact adjunct faculty’s ability to impact student learning” (Mueller et al., 2013, p. 2).

Online Grading Feedback

Grading feedback, whether delivered in a face to face or online environment, is simultaneously characterized as one of the most important but most challenging aspects of teaching and education (Hattieb, 2012; Tierney, 2013). For many, online learning has become the new normal for education (Betts, 2017). Thus, as online learning continues to grow in popularity, both the online grading feedback process and instructor beliefs and perceptions associated with the grading feedback process take on increasingly important significance (Allen & Seaman, 2017). There is also research that suggests some of the previously identified challenges associated with providing timely, actionable, and specific feedback are compounded in the online learning environment. Joyce and Joyce (2017) emphasized the importance of directly providing feedback on student writing if instructors hope to help students in writing-intensive courses (Joyce & Joyce, 2017). Rawle, Thuna, Zhao, and Kaler (2018) also wrote on the importance of personalized feedback for growth and development on the part of students and their writing processes.

However, grading student writing, a large component of online course work, is time-intensive and “opens up greater opportunity for subjective” analysis (Schinske & Tanner, 2014, p. 163).

Others warn that online instructors may be more susceptible to burnout based on research studying emotional exhaustion and depersonalization factors (Hogan & McKnight; 2007; Horvitz et al., 2015). Horvitz et al. (2015) wrote that because “professors’ satisfaction is one of the five pillars necessary to support quality learning in higher education, it is critical that more research focus on online instructors’ resilience which . . . is related to teachers’ levels of self-efficacy” (p. 308). Some argued that, given limited access to nonverbal and verbal feedback, there are fewer opportunities to both identify and resolve issues in online courses (Walther, 2006). Further, online interactions are not immune to the equity and social justice concerns associated with evaluation (Baker, Dee, Evans, & John, 2018; Milkman, Akinola, & Chugh, 2015). As an example, Milkman, Akinola, and Chugh (2015) cited evidence that students with names that are suggestive of race and/or gender often receive different types of instructor responses. Protivinsky and Munich (2018) wrote, as well, on issues of gender and associated biases in the grading process and associated implications and inefficiencies throughout educational systems and beyond.

Sources of Challenge and Need for Change

Despite the persistent challenges, much research confirms that students need instructor feedback. Students, including college students, also consistently express desires for feedback (Higgins et al., 2002). Bloomberg and Pitchford (2017) described feedback as doubling “the rate of learning, and that’s not just for students” (p. 18). Simply put,

feedback has unique and powerful implication for student learning and associated growth and development (Hattie & Temperley, 2007; Laurillard, 2002; Wisniewski, Zierer, & Hattie, 2020). Questions focusing on the source of the challenges associated with providing valuable feedback emerge.

Much in the literature criticizes instructors for not providing quality, actionable feedback. Less research looks at the reasons underlying the issue and why instructor might not feel capable of providing such feedback given the realities of their work and lives. The issue is so complex that even Hattie (2008b), a scholar with decades of research focusing on feedback admits that he has “struggled to understand the concept” (p. 173). Given the persistent challenges that surround the grading process and the associated commonly held understanding of the importance of grading feedback on student growth and learning, it is imperative to find ways to better support online faculty, who are often faced with large classes, writing intensive assignments, and limited time, in the grading feedback process.

Exploring associated issues of efficacy provides opportunities to better understand this challenge. Efficacy refers to a belief in one’s ability to influence events. Bandura (1989) described an individual’s belief in their efficacy to impact events in their lives as a central and driving component of human agency. In particular, in the researcher’s experience a lack of instructor self and collective efficacy presented as a significant contributor to the above identified problems associated with the grading feedback process. The following sections explore each type of efficacy in more detail.

Efficacy in Teaching

Self-Efficacy

Self-efficacy refers to a person's beliefs (or degree of confidence) regarding whether or not he/she is capable, based on an assessment of his/her knowledge, ability, and skills, of organizing and executing the courses of action needed in order to successfully complete an assigned task or desired goal (Bandura, 1977; Hattie & Clarke, 2019). Self-efficacy describes an individual's beliefs regarding the likelihood of being able to perform a task and, importantly, accepting related responsibility (Bandura, 1997). Further, perceived efficacy is a result of not only perceived competence but also appropriate incentives (Bandura, 1977). According to Bandura (n.d.), "[a]mong the mechanisms of human agency, none is more central or pervasive than people's beliefs in their efficacy to influence events that affect their lives" (p. 1). Despite its importance, efficacy is a concept that is frequently misunderstood (Bloomberg & Pitchford, 2017). According to Bong and Clark (1999), self-efficacy focuses more directly on cognitive self-appraisals as distinct from self-concept. Efficacy is about one's *belief* in his or her ability to be successful, implement and effect change (Bloomberg & Pitchford, 2017; Greene, 2018). Self-concept, in contrast, refers to one's thoughts and feelings about performance in a specific content area (Greene, 2018). Bandura first suggested that self-efficacy originates from and is shaped by an individual's "perception of cues in the social context in which the task is being learned or performed" (Greene, 2018, p. 40). Bong and Clark (1999) explained self-efficacy as dependent upon what an individual might think about their ability to achieve success on a particular task or goal. Past experiences with a similar task are one of the most powerful cues (Greene, 2018). However, individuals

must both recognize that a prior success took place and also believe that they were agents of that success in order to realize an associated influence on self-efficacy (Greene, 2018). Persuasion by others plays an important role in helping one identify mastery and support ongoing motivation.

Bandura (1977) wrote of the importance of self-efficacy given that individuals with high self-efficacy are more likely to persist at their work even when facing negative outcome expectation. Relatedly, individuals with low self-efficacy were less likely to persist when facing similar challenges (Bandura, 1977). Further, “self-efficacy is not a magical milestone to be reached or a box to be checked when completed. It is an ever-evolving process experienced by individuals as they move through their professional careers” (Bowles & Pearman, 2017, p. 109). Research suggests that self-efficacy conveys an individual’s association with goal attainment, regardless of an individual’s actual skill level (Bandura, 1993, Tschannen-Moran, Hoy, & Hoy, 1998). Self-efficacy is also contextual and describes a specific and focused perception that is directed to a specific task, goal, and context (Greene, 2018). This suggests that all individuals possess varying degrees of self-efficacy at a given time and in a given context and also that “self-efficacy can improve with each situation encountered and successfully handled” (Bowles & Pearman, 2017, p. 109).

In general, there are four sources that significantly contribute to the development of an individual’s self-efficacy beliefs (Bandura, 1997; Bloomberg & Pitchford, 2017; Hoy, 2000). Factors important for developing self-efficacy include past experience, persuasion, vicarious experiences, and physiological responses (Bloomberg & Pitchford, 2017). That is, these factors represent the sources of information individuals rely upon in

order to evaluate their self-efficacy (Bowles & Pearman, 2017). Successfully completing a task, enjoying a mastery experience, being persuaded that one can successfully complete a task, observing others successfully completing a task, as well as positive physiological states all positively impact one's self efficacy (Bandura, 1997). On the contrary, negative experiences with any or all of these four factors can negatively impact one's self efficacy (Bandura, 1997). Each of these four sources (e.g., past experiences with grading, observations of other instructors' grading, shared beliefs in their ability to provide quality feedback given available time, physiological states that accompany the grading feedback experience) also impacts feelings of online instructors and their beliefs associated with whether or not they can successfully provide quality and valuable grading feedback to their students. The following section explores instructor efficacy, a form of self-efficacy that focuses on instructional contexts, in more detail.

Instructor Efficacy

Relatedly, instructor (or teacher) efficacy refers specifically to a teacher's evaluation of his or her ability to support student learning and achieve desired educational results and student outcomes, including for students who might lack motivation and/or demonstrate related barriers to learning (Bowles & Pearman, 2017; Bruce et al., 2010; Takahashi, 2011; Tschannen-Moran & Hoy, 2001). Instructor efficacy can influence classroom interactions and also has the potential to impact the extent of instructional efforts as well as associated instructional goals (Tschannen-Moran & Hoy, 2001). Chang et al. (2011) studied instructor teaching efficacy and found that teaching performance both influence and are influenced by factors unique to the teacher as well as those present in the teaching environment.

Instructor efficacy has a variety of implications on behavior, including strong connections between an instructor's self-efficacy and associated teaching effectiveness (Bowles & Pearman, 2017). Wergin (2001) described efficacy as a critical factor in faculty motivation. Further, instructors with a strong sense of efficacy are generally more open to trying new ideas and methods (Bloomberg & Pitchford, 2017) and tend to “drive changes necessary for the improvement of our education system” (Bowles & Pearman, 2017, p. xii). Such instructors also demonstrate more persistence and resilience in the face of challenges (Bloomberg & Pitchford, 2017; Shaughnessy, 2004). Tschannen-Moran and Hoy (2001) noted that instructor efficacy also impacts the extent of efforts invested in teaching as well as associated goals and aspirations. Instructor efficacy is also related to student outcomes, student motivation, and even student efficacy (Horvitz et al., 2015; Tschannen-Moran & Hoy, 2001).

According to Bandura (2000), teacher self-efficacy can be increased by mastery teaching experiences, vicarious experiences, social persuasion, and physiological and emotional states. Further, Bloomberg and Pitchford (2017) noted that an instructor's confidence level regarding his or her ability to support student learning depends, in part, on school culture as well as past experiences. Instructors need to believe that their work will lead to desired outcomes and also that they can execute the behaviors that are necessary to yield such outcomes (Bandura, 1977; Bowles & Pearman, 2017). Relatedly, instructors need to believe that they have influence in and over the grading feedback process, in order to fully embrace the feedback and related learning experience.

Instructor Efficacy and Grading

Limited research looks at whether instructors feel able to provide the type of feedback that students need. Available evidence (both scholarly and anecdotal) suggests, though, that efficacy in this context is a persistent challenge. Feldman (2019) described a situation in which a discussion of grades with teachers “was like poking a hornet’s nest. Nothing prepared her for the volatility of conversations about teachers’ grading practices” (p. xix). Another teacher cried, “confessing that she had never received any training or support on how to grade and feared that she was grading students unfairly” (Feldman, 2019, p. xix). Exchanges like these parallel those experienced by the researcher in the online learning environment.

Online Teaching Efficacy

Instructor efficacy plays an important role in online learning settings, as well. Gavora (2010) described teacher efficacy as a type of self-efficacy relating to individual beliefs regarding an ability to achieve at a given level. Relatedly, instructors’ efficacy beliefs also refer to beliefs in their capacity to bring about desired outcomes in an online teaching environment (Horvitz & Beach, 2011; Richter & Idleman, 2017; Robinia & Anderson, 2010).

Researchers have found that online teaching efficacy in higher education contexts impacts motivation (Guzman & Nussbaum, 2009; Johnson, 2008; Liang & Wu, 2010; Sword, 2012). Others have identified a relationship between online teaching efficacy and instructional quality (Frazer, Sullivan, Weatherspoon, & Hussey, 2017; Koehler, Mishra & Cain, 2013; Pollacia & McCallister, 2009). Comfort with online educational technology is also correlated with online teaching efficacy (Kenny et al, 2012; Richter &

Ware, 2016; Robinia & Anderson, 2010; Shepherd, Albert, & Koeller, 2008). Robinia and Anderson (2010) identified a positive and significant correlation between an instructor's length of experience teaching online and online teaching efficacy. An instructor's online teaching efficacy has important implications, including impact on instructional innovation, work engagement, organizational commitment, instructor persistence, and student achievement (Burton, Bamberry & Harris-Boundy, 2005; Doo et al., 2020; Khan & Khan, 2018).

In light of previously described trends in online learning, it is important to better understand instructor online teaching efficacy and also to identify the types and extent of supports needed to develop efficacy in online instructors (Billings & Halstead, 2009; Sword, 2012). Richter and Idleman (2017) identified online teaching efficacy as an “important factor warranting attention” (p. 2). Further, despite current research exploring teaching efficacy in online contexts, “gaps exist related to sources of faculty online teaching efficacy” (Richter & Idleman, 2017, p. 2).

Instructors' Collective Efficacy

In addition to the need to better understand instructor online teaching efficacy, it is also important to explore teachers' collective efficacy in online learning environments. Collective efficacy describes a group's shared belief in its ability to organize and execute actions required to overcome challenges and produce given levels of attainment (Bandura, 1997; Donohoo, Hattie, & Eells, 2018). Bandura (1994, 1997) understood, moreover, that a schools' achievements depends upon both individual and collective contributions. Collective efficacy is a result of effective collaboration over time and “knowledge building through learning from one another” (Bloomberg & Pitchford, 2017,

p. 13). Collective efficacy, tied to collective action, is, at its core, the “ability to make things happen” (Bloomberg & Pitchford, 2017, p. 16).

Collective teacher efficacy refers to teachers’ collective beliefs and perceptions that their work has impact on their students beyond the students themselves, their individual homes, and their communities (Tschannen-Moran & Barr, 2004). The concept describes a group’s shared beliefs about their collective capability to promote successful student outcomes within their school (Bloomberg & Pitchford, 2017; Goddard, Hoy, & Woolfolk-Hoy, 2000). Eells (2011) defined collective teacher efficacy as the persistent and pervasive belief that directly impacts a school’s ability to cause and support student growth and achievement.

Scholars have written on the importance of collective teacher efficacy on student achievement (Bloomberg & Pitchford, 2017; Hattie, 2012b). Hattie has gone so far as to suggest that collective teacher efficacy is now the single most important influence on student achievement (Visible-Learning, 2018). In sum, having faculty that collectively believe they can achieve desired and associated excellent outcomes is critical (Bloomberg & Pitchford, 2017; Eells, 2011). Further, when instructors collectively believe in their shared ability to influence student outcomes, there are significantly higher levels of academic achievement (Bandura, 1993). Additionally, perceptions of a group’s collective efficacy impact “the diligence and resolve with which groups choose to pursue their goals” (Goddard et al., 2004, p. 8). This characteristic is influenced by both the group’s assessment of tasks and associated perceptions of competency (Donohoo, 2017).

For successful student outcomes, online instructors need to demonstrate both individual instructor online teaching efficacy and teacher collective efficacy in their

instructional efforts. Research has found that online instructors typically spend the majority of their time providing grading and feedback (Mandernach & Holbeck, 2016). It is important that instructors, individually and as a group, believe that such time is spent in a manner that meaningfully supports student achievement. Specifically, all stakeholders in the feedback process, including online instructors who often work in isolation and with little interaction with peers, need to collectively believe in their institution's potential to influence student outcomes. Thus, it is important to better understand online instructors' collective efficacy.

Online Instruction and Teaching Challenges

Not only is it important to better understand instructor online teaching efficacy and online instructors' collective efficacy, it is also important to better understand the variety of challenges associated with, and perhaps unique to, online teaching. Liu et al. (2007) studied online MBA instructors in order to better understand perceptions of teaching online. These online instructors identified a number of challenges, including a loss of personalization and perceptions of heavy workloads (Liu et al., 2007). Perrault et al. (2002) conducted a survey of online business professors to explore perceptions of challenges teaching online. Perrault et al. (2002) identified a number of technology-related concerns such as technology reliability, instructor and student competence with online platforms and associated supports. Richter and Idleman (2017) have identified time "as a critical element for successful online teaching," with faculty reporting "time as a huge constraint in using the best evidence-supported pedagogical practices" (p. 5). Other studies have similarly highlighted online instructors' concerns regarding "their perceived ability to teach online successfully – that is, their teaching efficacy" (Horvitz et

al., 2015, p. 306). Sadler (2016), citing Fiamengo (2013), wrote of trends in higher education assessment practice with an “underlying drive...to ensure the least possible discomfort or stress for students” (p. 1094). Similarly, efforts to minimize discomfort and stress for faculty are needed.

Increasing Efficacy in Online Environments

When exploring options to support individual instructor’s online teaching efficacy and online instructors’ collective teacher efficacy, research suggests that efficacy can be developed through professional development activities (Goddard et al., 2004).

Additionally, Richter and Idleman (2017) emphasized the importance of supporting faculty in the development of online teaching skills and also of recognizing faculty for the time commitment required for effective online teaching. Richter and Idleman (2017) found that online instructors with more professional development supports and time to develop their online courses had higher levels of efficacy.

Lee and Tsai (2010) found that instructors with more online instructional experiences had higher self-efficacy teaching online. Horvitz et al. (2015) found that what most significantly impacted teachers’ online teaching self-efficacy were perceptions of student learning, satisfaction with online teaching, and future interest in online teaching. Importantly, many of these factors can be addressed through professional development training and increased online instructional support efforts (Horvitz et al., 2015). Many express challenges managing time spent grading online work as well as associated frustrations of students failing to review and apply provided feedback. The researcher’s own experiences provide additional evidence of these sentiments. Horvitz et al. (2015) further noted that “[t]he most important further research we see needed is

studying the way we train and support professors to teach online” so that online instructors do not give up before developing the necessary levels of efficacy needed for success (p. 315). Further, “[m]ore research is needed that examines the outcomes of different training and support approaches and messages on the self-efficacy of online instructors” (Horvitz et al., 2015, p. 314).

Faculty Professional Development

Moving to the question of how, specifically, to support and nurture instructor online teaching efficacy and teachers’ collective efficacy, research on faculty professional development offers important insights and opportunities. While “[a] review of the history and research on grading practices may appear to present a bleak outlook on the process of grading and its impacts on learning” there are “opportunities for faculty members to make assessment and evaluation more productive, better aligned with student learning, and less burdensome for faculty and students” (Schinske & Tanner, 2014, p. 165). Opportunities to provide further support for instructors and associated online teaching efficacy, collective teacher efficacy, and perceptions of the grading feedback process are both possible and needed.

Needed supports come in many forms. For example, Izci (2018) wrote of the need for additional resources to help instructors support increasingly diverse student populations. Similarly, Darling-Hammond (2006) argued for additional professional development to support teachers with increasingly diverse learners. Similarly, Burton, Bamberry and Harris-Boundy (2005) argued that additional support for online instructors should be considered an essential investment in students given the close relationship between teaching efficacy and student achievement.

In connection with grading, Alshakhi (2019) suggested that “conducting grading workshops and meetings” is beneficial for both teachers and coordinators (p. 183). Additionally, teachers need to develop assessment techniques that provide feedback appropriate to their academic disciplines, their individual teaching goals, and their students (Angelo & Cross, 1993, p. 371). Relatedly, Reeves (2014) suggested implementing training on unconscious bias for all those evaluating others, as online instructors do through the grading process. In her 2014 study, she confirmed an initial hypothesis that unconscious confirmation bias in a supervising lawyer’s assessment of legal writing would result in a more negative rating if that writing was submitted by an African American lawyer in comparison to the same submission by a Caucasian lawyer (Reeves, 2014).

Feedback Strategies

Existing research also describes a variety of approaches and strategies specifically designed to provide additional instructor supports in connection with the grading feedback process. For example, Paul, Potter, and Weiss (2013) explored “Grading by Response Category” to improve feedback timeliness and quality. Pursuant to this method, instructors develop and grade using detailed and “well described” categories that “give students feedback specific to their error and so are arguably more useful than solutions alone” (pp. 486-487). Kos and Miller (2017) developed and implemented both “Divide-and-Conquer” (where teaching assistants split students by section and grade a subset of student work) and “Grade-a-Thon” (where hired graders would attempt to grade all student work in a single, large block of dedicated time) strategies in a large, freshman engineering course as efficient alternatives that supported timely feedback. Additionally,

common feedback hand grading helped the researchers develop comment feedback comments that could be reused for multiple students (Kos & Miller, 2017). Kos and Miller (2017) found that developing a list of commonly used comments helped the grading team provide feedback in a more efficient manner. As another example, Yeager and colleagues (2014) have developed a strategy known as WISE feedback which frames feedback in language that communicates both high expectations and associated support and trust that the expectations are attainable. Pursuant to this strategy, instructors place emphasis on high standards and expressing belief in student associated capabilities. Associated studies have found WISE feedback improved student work and also reduced feelings of mistrust amongst Black students and teachers (Yeager et al., 2014).

Statement and Comment Banks. Scholars have also explored the use of pre-developed comment banks that add efficiencies to the grading process. Content and tone of such comments is important, especially in light of the research by Higgins, Hartley, and Skelton (2002) suggesting that students react negatively to feedback that does not provide detail addressing how students might address deficiencies. Specificity is also important given that students do not find feedback helpful when it is generic or vague (Denton & McIlroy, 2018; Huxham, 2007; Weaver, 2006).

Common bank features include a statement bank of frequently used comments that can be easily assigned to students and provide timely and constructive information to help students better understand their performance and how to improve (Denton et al., 2008). Use of a comment bank eliminates any requirement to rewrite or retype comments multiple times and also support more timely and more detailed evaluation processes (Buckley & Cowap, 2013). Denton and McIlroy (2018) described comment banks as

supporting enhanced consistency in feedback quality and quantity. Nicol and Milligan (2006) suggested that feedback bank comments must be developed based on sound educational principles. For example, Black and William (1998), in a review of classroom assessment, found that feedback that focused more on individual students than their work product negatively impacted student attitudes and student performance.

Other studies have identified the potential for predeveloped comment banks to expedite grading processes (Case, 2007). Denton and Rowe (2014), citing a study conducted by McKie Bell, Smailes, and Smith in 2006, described a time savings of 30 hours when studying two statistical assessments involving 120 students. Denton and Rowe (2014) noted that providing comments from a bank can be especially helpful “when marking work at the extremes of the marking scale, where tutors might otherwise recourse to drafting perfunctory remarks relating to a student’s ability or intelligence” (p. 3). Denton and Rowe (2014) also wrote on the possibility that agreed-upon comment banks shared amongst a team of instructors can promote consistency in both scoring and feedback.

The educational effectiveness of relying upon feedback comment banks is a promising but currently underexplored area (Denton & McIlroy, 2018). Relatedly, Chapman and King (2012) have noted the potential for technology to enhance assessment for teaching and learning purposes. Scholars and teachers have also looked to technology to assist with providing feedback. In fact, a variety of technological applications are also available to support assessment.

Technology Integration. Research has also investigated technology-enhanced approaches, including electronic marking assistants to provide online feedback (Denton

& McIlory, 2018). Students have provided positive feedback with such approaches (Denton et al., 2008; Watkins et al., 2014). Tutors have as well (Buckley & Cowap, 2013; Heinrich, Milne, & Moore, 2009).

Automated grading was evaluated in a recent study by Xiaoxiao (2018). Xiaoxiao (2018) described automatic grading as an “inevitable trend” and analyzed the impact an automatic feedback system on English writing. The researchers studied 118 students and associated results and found that online feedback could effectively evaluate students’ English writing level. Others have proposed that instructors consider using an online grammar checker when grading student work (Joyce & Joyce, 2017). In addition to those mentioned earlier in this chapter, options include tools such as Grammarly, Slick Write, and Spell Check Plus. However, to date only Grammarly has been explored in the academic literature (Joyce & Joyce, 2017). There is limited research evaluating the utility of this type of tool to improve the timeliness and/or objectiveness of associated feedback (Joyce & Joyce, 2017). Joyce and Joyce (2017) noted that significant opportunities to explore this type of use case remain. Further, although online statement banks are increasingly used in higher education, there is limited research exploring the effectiveness of this type of feedback (Denton & Rowe, 2014; Nicol & Milligan, 2006).

Summary

After reflecting on personal and professional experiences as well as closely evaluating existing literature associated with the identified problem of practice, the researcher identified a lack of instructor online teaching and collective teacher efficacy to be significant factors associated with the problem of practice and the online grading feedback process. The researcher also identified promising but limited research exploring

the impact of online statement banks and the grading feedback process. Therefore, this action research study explored how the availability of a web-based, collaborative grading feedback comment bank impacts individual instructor's online teaching efficacy and online instructors' collective teacher efficacy as well as online instructors' attitudes and perceptions of the grading process.

The shared research and theories, taken together, represent the multi-faceted and robust framework, with layers of personal constructed learning experiences, mastery learning, equity, and collaboration, through which the researcher explored how to improve the assessment grading process for both instructors and students.

CHAPTER 3

METHODOLOGY

Action Research Methodology

Research demonstrated that feedback is a critical component of any quality learning experience (Hattie, 2012). However, providing and receiving assessment feedback is complex (Tierney, 2013). As the popularity of online education continues to grow, it is increasingly important to focus on the development of tools, resources, and related interventions that support instructors as they seek to support students through grading feedback (MacArthur & Villagran, 2015). As Hattie, Fisher, and Frey (2016) wrote, “[i]t’s not easy to break through the walls that everyone has about . . . feedback, but it’s well worth the effort” (p. 17). Moreover, it is arguably disingenuous to talk about what we want to see in grading feedback if we do not build tools to help instructors deliver such feedback in a way that simultaneously impacts instructors’ belief in their ability to impact student success. Given the challenges, instructors and students might benefit from additional tools, collaborations, and interventions designed to support learner-centered feedback and feedback experiences.

Problem of Practice

The problem addressed in this action research study involved a variety of challenges online instructors and students encounter in connection with the grading feedback process. The researcher worked with online instructors, each of whom was responsible for all grading in their individual course sections, who would often express

their frustrations with a limited ability to provide supportive, individualized, and student-specific feedback on written assignments. Instructors would often lament about increasing class-sizes, text-heavy assignments, and limited time to provide personalized and actionable feedback. Instructors would also share frustrations that, even after devoting time to provide what they perceived as detailed and supportive feedback, students often failed to use and apply feedback recommendations in future work.

Additionally, students would sometimes react negatively to feedback the instructors believed was both clear and supportive. At the same time, the researcher was often asked to review, often at administrator requests, complaints submitted by students who were unhappy with their performance on an assessment. The researcher was also asked to evaluate feedback earlier provided by instructors on student assignments so as to provide recommendations associated with student grade appeals, many of which were grounded in perceptions of a lack of timely, clear, actionable, fair, and/or detailed feedback in their courses. Online instructors and students both expressed frustrations, barriers, and persistent challenges associated with the grading feedback process. These frustrations manifested and ultimately impacted, in negative ways, self-efficacy and confidence in online instructors' abilities to successfully support positive teaching experiences in their online classrooms and student learning and achievement as reflected by course goals and objectives. These barriers and associated frustrations were often reflected in the researcher's own online teaching and learning experiences, as well.

Morrison (2013) defined instructor feedback as personalized and constructive commentary on student coursework and class contributions. Wiggins (2012) has written that feedback is "information about how we are doing in our efforts to reach a goal"

(para. 4). Said another way, feedback refers to the written or verbal comments that are shared by an evaluator in response to student work and which are intended to motivate learners as well as share specific suggestions for revision and improvement (Chapman & King, 2012). Irrespective of the phrasing used to define the concept, research has consistently shown that feedback, when offered correctly, has the unique ability to transform a learner, and the learner's learning experience, for the better (Hattie, 2012).

According to Hattie (2012a) and his extended research on this topic, feedback ranks as one of the most significant factors impacting the quality and authenticity of the learning process. Despite the impact, both potential and actualized, the grading feedback process persists as one of the most challenging and stressful parts of teaching for many instructors (Hansen & Gray, 2018; Tierney, 2013). As noted, there are related questions of equity and bias in grading feedback, as well. Research has consistently found that grading practices vary, often significantly, from school to school, program to program, and teacher to teacher (Feldman, 2018; Kohn, 1999).

Over the past several years, growth in online programs has continued to rise with “[o]nline education is one of the fastest growing segments of higher education in the U.S.” (Gallagher, 2019, para. 1). Growth in online learning has also introduced a variety of new and somewhat unique challenges to the grading feedback process. For example, online courses “require more student writing than face-to-face classes, and, consequently, instructors must respond to more writing as well” (Laflen & Smith, 2017, p. 41). Demands on instructor time can be compounded in the online, writing intensive context. Especially in large classes, providing written feedback can significantly increase faculty workloads (Crisp, 2007; Law, 2019; Mandernach, Hudson, & Wise, 2013; Nicol &

Macfarlane-Dick, 2006; Norton, Norton, & Sadler, 2012). On the student side, Dowden, Pittaway, Yost, and McCarthy (2013) suggested that students' possible emotional reactions to feedback are not fully understood or appropriately accounted for throughout the grading feedback process. Despite, or perhaps because of, the challenges, there is no general consensus for how online instructors can most effectively and efficiently adopt and adapt grading best practices in the online environment (Laflen & Smith, 2017).

Research Questions

To further understand how to improve online instructor efficacy as well as attitudes and perceptions associated with the online grading feedback process, this action research mixed-methods study explored the following research questions:

Research Question 1: How does the use of a web-based grading feedback comment bank impact online instructor's teaching efficacy?

Research Question 2: How does the use of a web-based grading feedback comment bank impact collective teacher efficacy within an online university?

Research Question 3: How does the use of a web-based grading feedback comment bank impact online instructors' attitudes and perceptions of the grading process?

Purpose of the Study

The study's purpose was to develop a deeper understanding of how the study intervention and associated professional development might help support online instructors in the grading feedback process. Specifically, the study examined how administrators, instructors, and schools might collaborate and work together in order to improve both the online teaching experience for online instructors as well as the

associated grading feedback online instructors provide their students. The study highlighted both opportunities and ongoing challenges in connection with potential modifications and enhancements to the online grading feedback process as well as the online instructor experience more generally.

Cognizant of the importance of quality feedback and the simultaneous challenges online instructors face when working to share quality feedback with students, the researcher collaborated with study participants with the goal of better understanding how the proposed intervention might support online instructors in providing their students with quality feedback in a timely and an efficient manner. Relatedly, the researcher evaluated the impact of such an intervention on online instructor teaching and collective efficacy. In sum, this research study explored the impact of a specific intervention (a web-based feedback bank and associated professional development sessions) on instructor online teacher efficacy (individual and collective) and instructor attitudes and perceptions of the online grading feedback process.

Intervention

In this project, the researcher designed and developed a web-based, collaborative feedback comment bank along with a series of associated professional development webinars with the hopes of improving the grading feedback process for online instructors as well as the grading feedback provided by online instructors. Development was iterative, with feedback comments drafted and added to the web-based comment bank on an ongoing basis. Comments were curated and crafted, in part, based on the researcher's own online teaching and learning experiences, in response to applicable assessment expectations and associated rubric elements, and as examples and illustrations of

common corrective and suggestive feedback categories, among other sources and inspiration. In doing so, the researcher reflected on an observed problem and collaboratively considered and examined alternative ways the problem might be addressed. Instructor input supported collaborative and ongoing iterations to the intervention (a web-based collaborative feedback comment bank).

The web-based feedback bank was shared with instructors at the beginning of the study. Reminders and updates were shared weekly, throughout the duration of the study. While the intervention was first shared with foundational content and sample feedback comments for commonly used feedback categories (including discussion board posts, written assignments, digital assignments, grammar, and APA style), the intervention was dynamic and constantly updated and expanded throughout the study. The intervention also included links to a variety of research articles and blog posts written on the topic of grading feedback. Quotations speaking to the power of feedback and related topics as well as original checklists designed to prompt reflection associated with the grading feedback were also included on the intervention host site. Feedback-related graphics and animations were designed and incorporated. Figures 3.1 and 3.2 illustrate rotating carousel messaging, with updates on new comment categories and new comment bank features, that appears on the comment bank's home page as well as the comment bank home page.

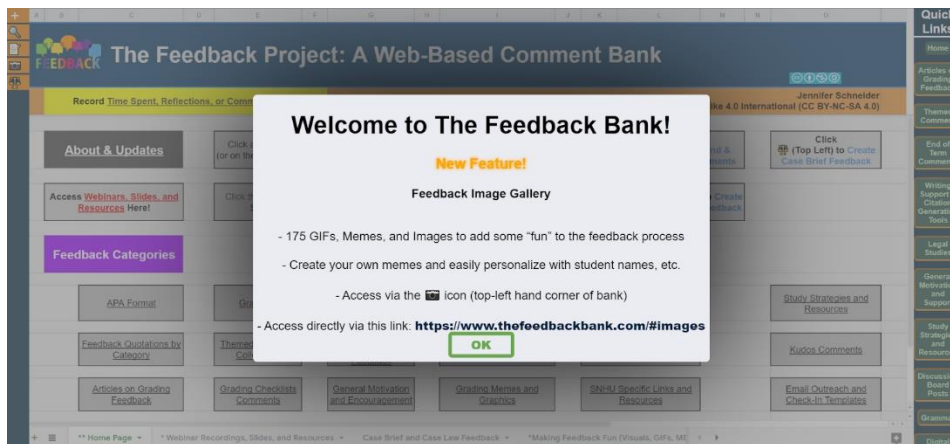


Figure 3.1 *Feedback Bank Rotating Carousel Messaging*

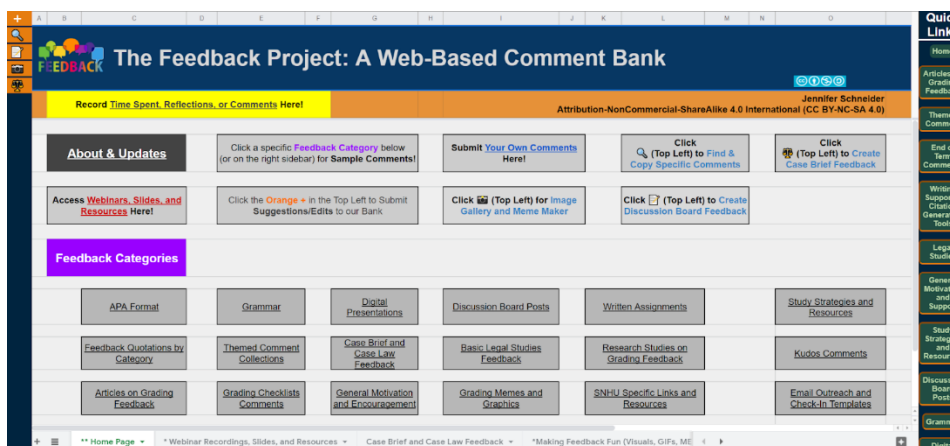


Figure 3.2 *Feedback Bank Home Page*

In addition to feedback comments, the intervention grew, largely in response to participant input, to include original, fully integrated tools. Example features included a discussion board and case brief narrative feedback generator, global search functionality, a supporting Chrome extension, and a feedback-based Meme generator (applicable to the bank’s curated image gallery and collection of over two hundred graphics). Figure 3.3 provides a screenshot of the comment bank’s Chrome extension. Figure 3.4 provides a screenshot of the comment bank’s case brief narrative feedback generator. Figure 3.5

provides a screenshot of the comment bank’s image personalization and Meme generator tool. Figure 3.6 provides a screenshot of the comment bank’s global search tool.

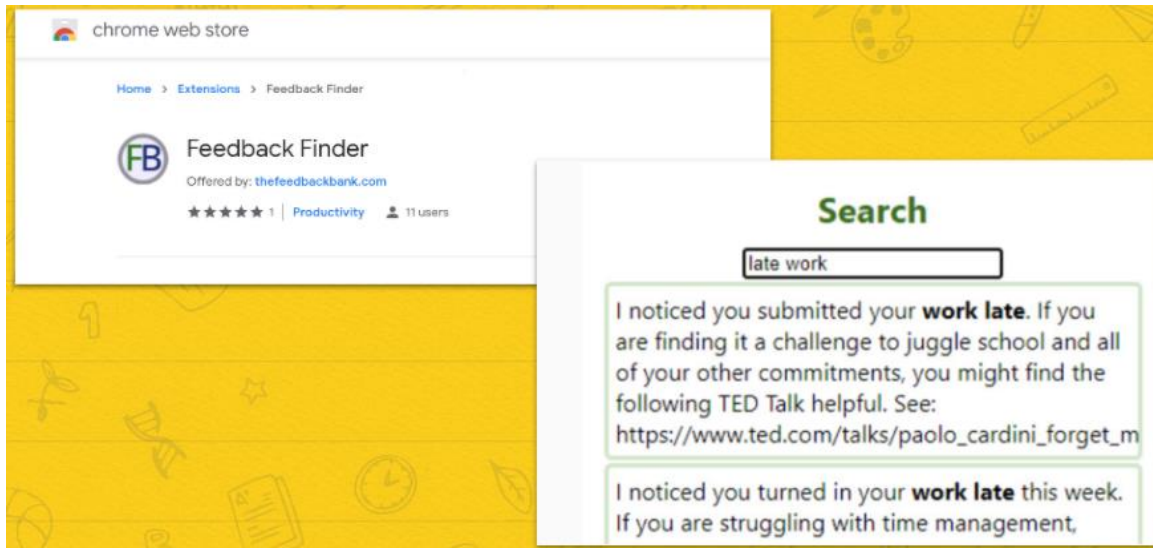


Figure 3.3 *Chrome Extension Feature*

×

Case Brief Generator Dropdowns

Student Name

General

Case Brief Facts

Case Brief Issues

Case Brief Content

Case Brief Updates

Reading Case Law

Timeliness

Figure 3.4 *Case Brief Narrative Feedback Generator Feature*

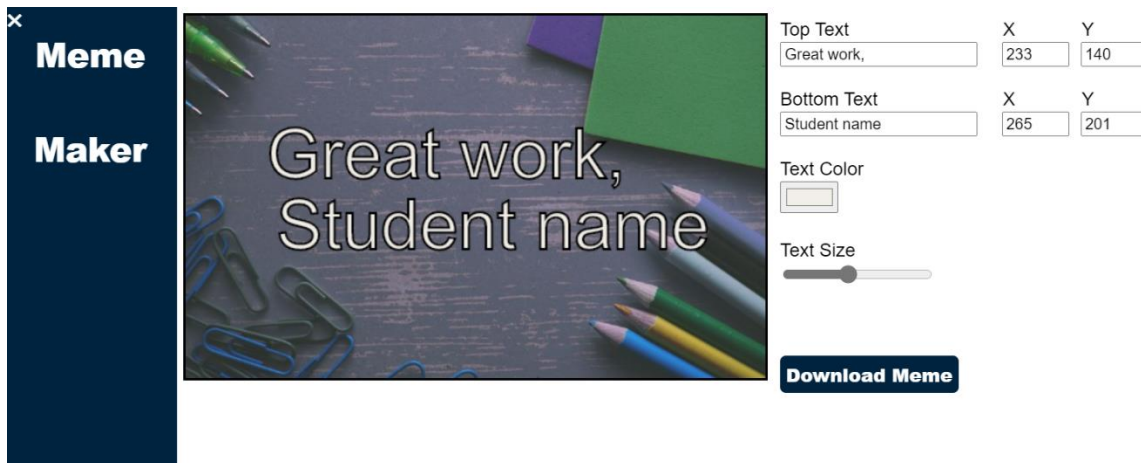


Figure 3.5 *Image Personalization and Meme Generator Feature*

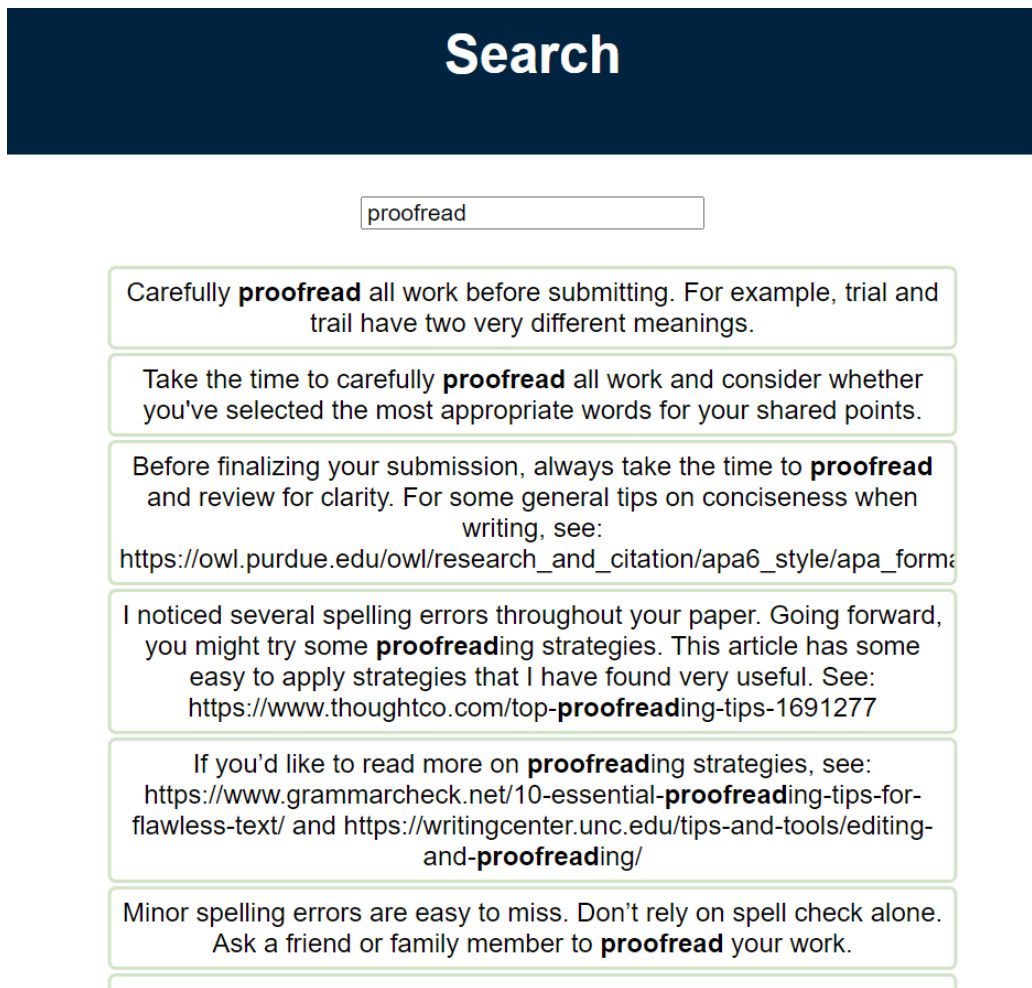


Figure 3.6 *Global Search Feature*

All incorporated features were responsive to participant input and designed specifically to support instructor feedback. The researcher simultaneously designed and delivered associated professional development, including three unique webinars, throughout the duration of the study. All webinars were recorded and shared with all study participants. Associated webinar resources and materials were later uploaded to the web-based comment bank, as well. In this way, the webinars also served as additional content in the bank and a supplemental resource for participant review and access.

Each webinar provided an opportunity to introduce information and research on grading feedback and the related feedback process as well as train participants on use of the intervention. The webinars also provided a platform and dedicated time to intentionally explore and reflect, at a deeper level, various aspects and challenges of the feedback process. The webinars also served as alternative communication streams to provide additional support and context for the web-based comment bank. Moreover, the webinars initiated and led to ongoing communications and informal conversations that prompted ongoing iterations and improvements to the intervention.

The first professional development webinar focused on characteristics of quality grading feedback and also introduced the web-based comment bank. The second professional development webinar focused on issues of bias and equity in connection with grading feedback. The third professional development webinar explored strategies to incorporate additional joy into the feedback process. In both the second and third webinar new web-based comment bank features were introduced.

In connection with the aforementioned steps, the researcher reflected on an observed problem and collaboratively considered and examined alternative ways the

problem might be addressed. Instructor input supported collaborative and ongoing iterations to the feedback comment bank and the supporting professional development webinars. The intervention was revised and updated in a continuous manner, based on researcher reflections, participant input, and collaborations.

Action Research Method/Design

A mixed-methods, action research design was used to explore the above identified research questions. Action research is generally defined as research in which data on a specific problem is “gathered, appropriate resolution options are decided on and finally the results are evaluated” (Tuncel & Icen, 2016, p. 110). The action researcher seeks to identify solutions to urgent problems. Tested solutions can be implemented with little (if any) time delays and address, in powerful, unique, and tailored ways, the problems exhibited by a particular instructor and student population.

Action research is “typically aimed at solving a problem in practice, or developing an intervention and to research not only its overall effects, but also how the process itself unfolds” (Merriam & Tisdell, 2016, pp. 234-235). Action research is also especially useful in higher education environments. Calder and Foletta (2018), for example, wrote that action research is “not a linear methodology of research but instead a cyclical process that proceeds through greater levels of complexity” and promote its further use in higher education (p. viii). Relatedly, Fernández-Díaz, Rodríguez-Hoyos and Calvo (2018) wrote of the potential for action research to “generate actions to transform our teaching practice” (p. 191). Further, Ventura (2018) wrote that action research in higher education promotes innovation.

Efron and Ravid (2013) wrote that the “mixed-methods approach proposes to cross boundaries between worldviews and blend (or combine) qualitative and quantitative research methods and techniques into a single study” (p. 45). According to Denzin (2010), “[m]ixed, multiple, and emergent methods are everywhere today, in handbooks, readers, texts” (p. 419). The use of mixed methods approaches to research is increasingly and widely endorsed in a variety of contexts, including education (Denzin, 2010). Mixed methods research design refers to “a general type of research that includes quantitative and qualitative research data, techniques and methods” (Ayiro, 2012, p. 489). Advantages include analysis of “a problem from all sides”, the use of varied approaches which “helps to focus on a single process and confirms the data accuracy,” and a process that “complements a result from one type of research with another” (Ayiro, 2012, p. 490). As Efron and Ravid (2013) explained, the “goal of mixed-methods research is to draw on the strength of both quantitative and qualitative research to enhance school improvement” (p. 46). Further, “[c]ombining both techniques in a single study enables the researcher to use multiple mixed methods to explore different aspects of the same question” (Efron & Ravid, 2013, p. 46).

Setting and Participants

Study participants included 18 online instructors at a large, private university that serves a global student population and has a primary, physical campus in the United States. Participants (14 males and four women) were online instructors in the university’s college of online and continuing education. Thirteen were between the ages of 41 and 60, four were older than 60, and one preferred not to say. Figure 3.7 presents this information in graph form.

Age

18 responses

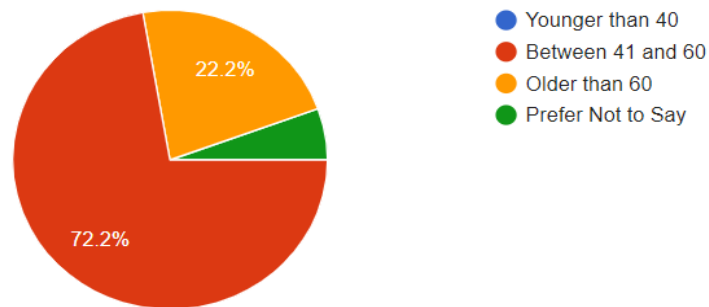


Figure 3.7 *Age of Participants*

Seventeen participants were employed as adjunct faculty, with one participant indicating full-time instructor status. Of the 18, one participant also indicated full-time administrator status and one indicated team lead status. Figure 3.8 presents this information in graph form.

Please identify your current academic appointment type at the site university

18 responses

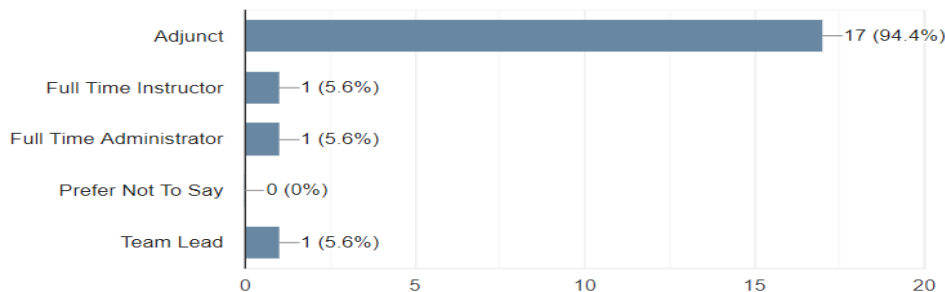


Figure 3.8 *Academic Appointment of Participating Faculty*

Nine participants held doctorate degrees, four held master's degrees (not education-related), and five held master's degrees (education-related). Of those with PhDs, five were in fields other than education. Two held JD degrees, one held a JSD degree, and one held a DSc degree. Figures 3.9 and 3.10 present this information in graph form.

Please identify the highest degree that you hold

18 responses

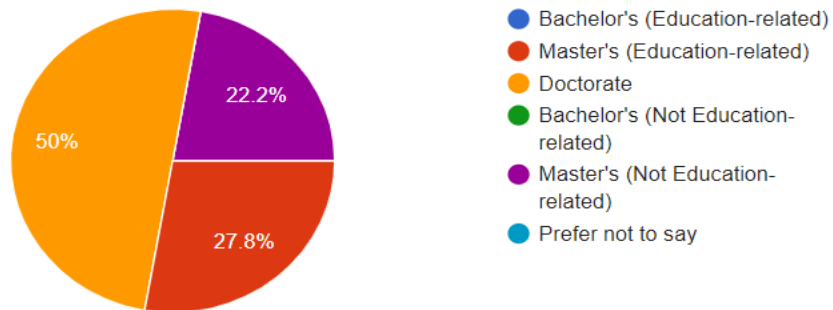


Figure 3.9 *Participant Educational Levels by Degree*

Please indicate the type of doctorate

9 responses

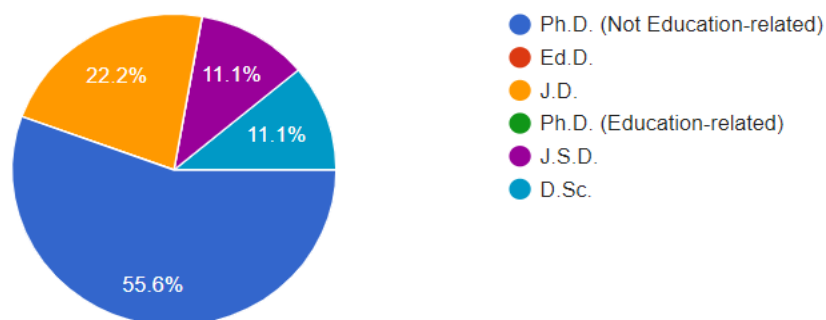


Figure 3.10 *Types of Doctorates Held by Participants*

Participants taught both graduate and undergraduate criminal justice courses, as well as a wide range of courses (including introductory courses such as research methods and writing in the criminal justice profession, intermediate level courses such as intelligence and surveillance, ethics-related criminal justice courses, as well as a criminal justice program capstone course). Figure 3.11 presents the breakdown between graduate (five) and undergraduate (eight) instructors, with several (five) teaching both levels.

Figure 3.12 shows more on the variation and range of courses taught.

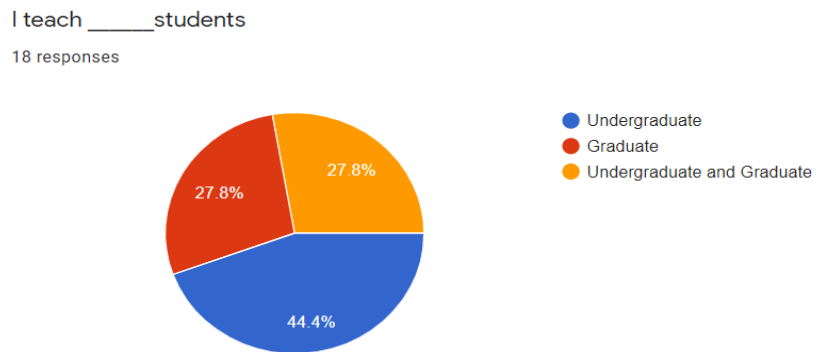


Figure 3.11 *Instructional Focus by Level*

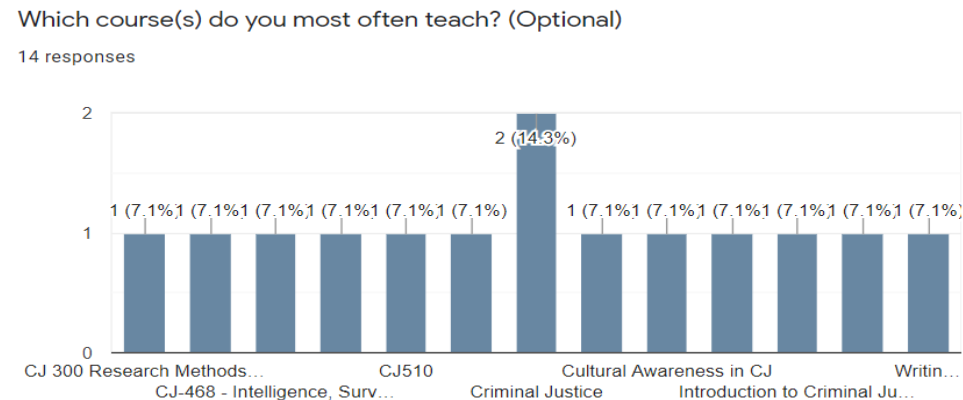


Figure 3.12 *Instructional Focus by Course*

Terms ran for 8 weeks for undergraduate instructors and 10 weeks for graduate instructors. Participating instructors were previously assigned sections of standard department courses to teach in any given session. All participating instructors had taught their assigned course(s) in prior terms. Of the 18 participants who completed the pre-intervention survey, two had taught their current course more than 20 times, four had taught their course 11-20 times, 11 had taught their current course two-10 times, and one had taught course once before.

Most participating instructors held other positions of employment, in addition to their university-teaching with 13 holding full-time positions and one holding an additional part-time position. Figure 3.13 shares more detail on participant employment.

Employment, in addition to your teaching responsibilities

18 responses

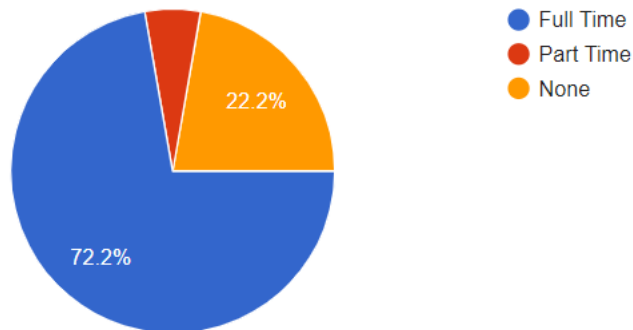


Figure 3.13 *Participant Employment*

Most participating instructors had ongoing and concurrent education-related responsibilities, in addition to their university instruction, as well. While six participating instructors indicated that they did not work for any additional educational institutions, six

indicated that they also taught at a community college, three indicated that they taught for another 4-year college or university, and three shared that they simultaneously taught in other educational environments. Figure 3.14 provides additional detail.

In addition to your work at the site university, do you currently work for any additional educational institutions? If so, what type?

18 responses

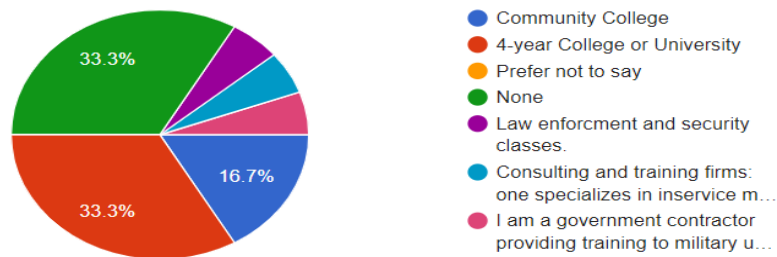


Figure 3.14 *Additional Teaching Appointments*

Participating instructors were also experienced in online instruction. Of the 18 participants, seven had been teaching online for more than 10 years, seven had been teaching online for more than 5 and less than or equal to 10 years, three had been teaching online for more than 1 and less than or equal to 5 years, and one had been teaching online for 1 year. Figure 3.15 present participants' online experience in graph form. Figure 3.16 shares more on the numbers of online courses participants have taught overall. Figure 3.17 shares more on the number of online courses participants have taught at the site university.

How many years of experience do you have teaching online courses?

18 responses

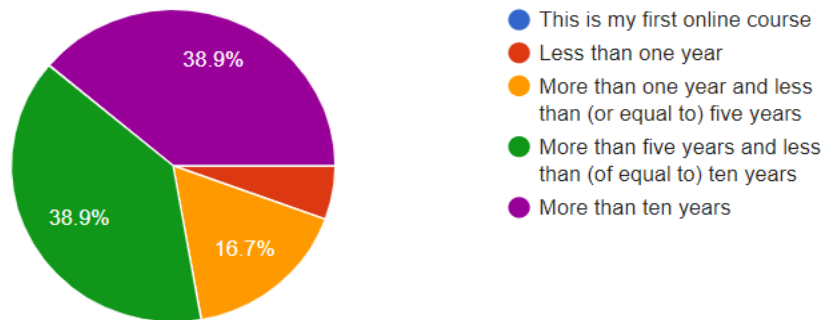


Figure 3.15 *Years of Experience Teaching Online Courses*

Approximately how many online courses have you taught overall?

18 responses

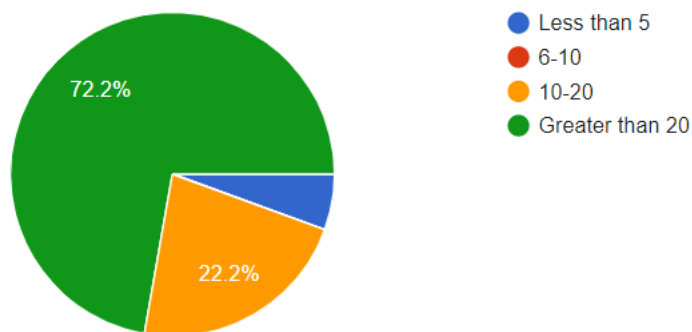


Figure 3.16 *Number of Online Courses Taught Overall*

Approximately how many online courses have you taught at this University?

18 responses

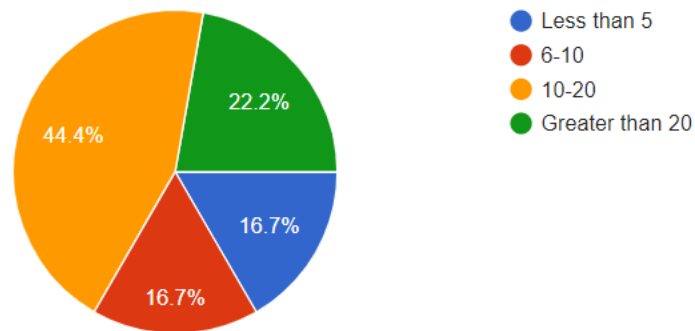


Figure 3.17 *Number of Online Courses Taught at Site University*

Further, a significant majority of the study's participants (all but one) were previously familiar with feedback banks. Figure 3.18 shares more on participants' prior experience with feedback banks. Possible responses included "I currently use a comment bank that I created and developed;" "I currently use a comment bank that someone else shared with me;" "I would like to use a comment bank, if it has the content I need;" "I do not know if I will have any interest in using a comment bank;" "I do not think a comment bank will help me with my grading;" "I have never considered using a comment bank to help me with my grading;" and "I do not know what a feedback comment bank is."

Which of the following statements describes your thoughts and experience(s) with a feedback comment bank when grading? For purposes of this question, a feedback comment bank is a collection of commonly used grading feedback comments. Check all that apply.



17 responses

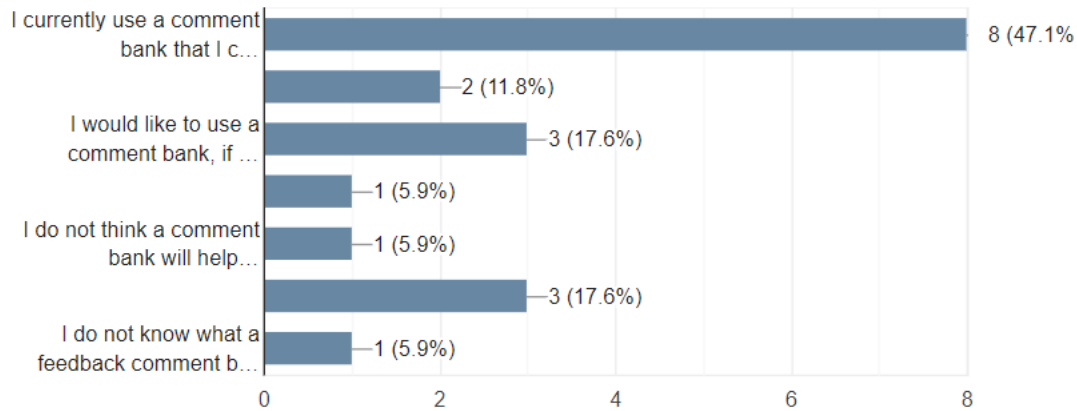


Figure 3.18 *Participant Experience with Feedback Comment Banks*

Non-probability, purposeful, unique sampling was employed in connection with the study’s focus on online instructors. In addition, based on access to available and interested online instructors, convenience sampling was applied in the research study. Convenience sampling, a method that results in a sample “based on time, money, location, [and] availability of respondents” was well suited to this study’s design and needs (Merriam & Tisdell, 2016, p. 98). While convenience sampling is not as desirable as a random sample, where each individual in the target population has “an equal probability of being selected,” convenience sampling was used due to the increased likelihood of participation based on instructor convenience and availability (Creswell & Creswell, 2018, p. 150). These sampling techniques are appropriate for mixed-methods, action research studies (Efron & Ravid, 2013; Merriam & Tisdell, 2016).

A minimum of 15 participants was sought for the study. While a larger sample size would have provided enhanced accuracy for quantitative data analysis and qualitative-based study inferences, this had to be weighed against the trade-offs of additional time and difficulties associated with recruiting additional participants (Creswell & Creswell, 2018). The minimum sample size of 15 participants was sufficient when considered from the lens of the study's qualitative data analysis plan which included coding, identification, and associated generation of descriptions and emerging themes across participant responses (Creswell & Creswell, 2018).

The 18 participating instructors exhibited a range of educational and professional backgrounds. All were presently teaching in the college of online and continuing education at the university which served as the home for the study. To protect the identity of the participants and study setting, pseudonyms were used throughout the study.

Time Frame of Study

This study was conducted over the course of an undergraduate (8 week) and graduate (10 week) session in the summer of 2020. Participants received access to the study's intervention at the start of the term and had ongoing access to the intervention throughout the term. A pre-term "Call for Participation" email invited faculty to participate in the study. Interested faculty were invited to attend a 30-minute virtual professional development and training webinar on the importance of quality and timely online grading feedback. This initial webinar was held immediately prior to the start of the summer 2020 term. Prior to the start of the webinar, participating instructors completed an initial, pre-intervention survey. Completion was confirmed at the webinar's start. At the conclusion of the initial professional development webinar, a link to all

feedback bank resources was shared and simultaneously emailed to participants.

Participants agreed to use the feedback bank throughout the term and to complete a post-intervention survey in week eight of the undergraduate term and week 10 of the graduate term, as applicable. Participants were also invited to attend a second 30-minute virtual professional development and training webinar during week four of the term as well as a third 30-minute virtual professional development webinar at the conclusion of the term (week nine). At the start of weeks two through nine of the summer 2020 course terms, a reminder email was sent to all study participants. This email included information regarding updates to the intervention, associated video tutorials, and a link to the feedback bank and supporting resources. In week four of the term, participating instructors were again invited to attend a 30-minute virtual professional development webinar. All professional development sessions occurred virtually due to geographic location.

Brief, open-ended surveys were administered at the conclusion of each professional development webinar. Copies of each are included in Appendix C. Webinars were recorded and later shared with participants (along with a link to the survey) who were unable to attend the live sessions. Links to each webinar and associated support materials are included in Appendix D.

Timing of Pre- and Post- Intervention Surveys

Pre- and post- intervention surveys were administered prior to the start and at the conclusion of the respective undergraduate and graduate terms. Pre-intervention surveys were provided to participants in the recruitment email and prior to the first week of the session and the initial professional development webinar. Post-intervention surveys were

provided one and 2 weeks after the course session concluded for undergraduate instructors and in the final week of the session for graduate instructors. The closing survey was identical to the opening survey, but for the inclusion of five open-ended questions focusing on the study intervention. Surveys were administered as web-based surveys. This was appropriate as all participants required access to reliable Internet given the online nature of their work and study.

The primary purpose of this action research study was to better understand how the above described combination of professional development exercises and associated access to, and use of, a web-based, collaborative feedback bank might be used to improve the online grading feedback process experience and associated teaching efficacy for online instructors. Table 3.1 provides an overview of the intervention’s general schedule and time frame and Table 3.2 shows the study’s intervention content, all designed, delivered, and continuously updated in furtherance of the overall purpose of this research.

Table 3.1 *Time Frame of Intervention*

Week of Term/Session	Associated Action
Pre-term (3 weeks before term start)	-Pre-term “Call for Participation” email(s)
Pre-term (1 week before term start)	<ul style="list-style-type: none"> -Participants completed initial, pre-intervention survey -Hosted a 30-minute virtual professional development and training webinar on the importance of quality and timely online grading feedback -Link to feedback bank resources and intervention was shared with participants -Participants completed brief, open-ended survey at conclusion of webinar

Week of Term/Session	Associated Action
Weeks one through eight of term/session	-Weekly email communications with intervention updates and supporting video tutorial resources -Optional sessions (open discussions on online grading feedback and use of the web-based feedback bank)
Week four of term/session	-Hosted a 30-minute virtual professional development and training webinar -Participants completed brief, open-ended survey at conclusion of webinar
Week nine of term/session	-Participants attended a 30-minute virtual professional development webinar -Participants completed brief, open-ended survey at conclusion of webinar
Weeks 10/11 (post term/session)	-Emailed participants link to post-intervention survey

Table 3.2 *Schedule & Focus of Professional Development Sessions*

Virtual Professional Development Sessions (30 minutes)	Topics Covered
Week One, Webinar 1	Study and Intervention Overview / Building Blocks of Quality Feedback / Challenges Associated with Grading Feedback
Week Four, Webinar 2	Intervention Update / Equity and Bias in the Grading Feedback Process
Week Nine, Webinar 3	Intervention Update / Adding Fun to the Feedback Process

The next section describes the study's data collection methods.

Research Methods

The study combined both quantitative and qualitative research techniques in order to evaluate the impact of the availability and use of a web-based, collaborative feedback comment bank along with supporting professional development on online instructor self and collective teacher efficacy as well as perceptions and attitudes associated with the online grading feedback process. Several strategies were used to collect qualitative data for this study. A primary source of qualitative data collection included open-ended questions obtained through self-administered survey questionnaires administered throughout the study. In addition, informal interviews, conversations, and document analysis provided additional insights into feelings and reactions that online instructors associated with their instructional practices and online grading experiences. Saturation and observations as to when “continued data collection produces no new information or insights” guided the duration and extent of informal interviews (Merriam & Tisdell, 2016, p. 199). Questions for all informal conversations and interviews were developed in accordance with guidelines suggested by Merriam and Tisdell (2016).

At the same time, quantitative data in the form of numerical data was collected from self-administered survey questionnaires. As Efron and Ravid (2013) explained, multiple strategies yield different types of information and different data sources enhance the researcher’s ability to evaluate, compare, and contrast collected information. Associated triangulation helped ensure research validity (Creswell & Plano Clark, 2018).

In this study, the researcher was interested in better understanding the potential impact of the study intervention on instructor online teaching self-efficacy. The researcher was also interested in examining the impact of this same intervention on

instructors' collective teacher efficacy. Finally, the researcher wanted to understand how instructors "interpret their experiences" and "what meaning they attribute to their experiences" in connection with both the grading process and the development and use of the intervention (Merriam & Tisdell, 2016, p. 6). Specifically, the researcher was interested in a deep exploration or "depiction" of the "essence or basic structure" of the grading feedback experience (Merriam & Tisdell, 2016, p. 26). Merriam and Tisdell (2016) described a phenomenology-based design as a focus driven study of participants' experiences with an end goal that supports the basic structure of the experience. As such, phenomenology influenced and informed the researcher's underlying qualitative research design process.

To explore these interests and simultaneously obtain a variety of data (both types and sources) to answer the identified research questions, the researcher combined both quantitative and qualitative research techniques in order to explore a variety of aspects of the study's research questions. In summary, collected qualitative data in the form of broad open-ended questions (obtained through open-ended response items on administered surveys and informal interviews and conversations) and document analysis (obtained through collaborative documents and researcher notes) tapped into the "subjective meanings that individuals in the schools ascribe to their actions and experiences" (Efron & Ravid, 2013, p. 47). The researcher also used documents, notes, and informal conversations and interviews to understand the lived experiences of participating instructors. A phenomenological orientation was appropriate based on its emphasis on "experience and interpretation" (Merriam & Tisdell, 2016, p. 26). Collected quantitative data in the form of numerical data collected from self-efficacy survey

instruments was used to study cause-and-effect relationships in an experimental study (Efron & Ravid, 2013). Collectively, through both quantitative and qualitative methods, the researcher tested the effect of a planned intervention (a web-accessible, dynamic, collaborative comment bank) on online teaching self-efficacy, collective efficacy, perceptions, and attitudes of a group of participating online instructors.

The described methods of data collection and analysis demonstrated phenomenological qualities by “ferretting out the essence or basic structure of” an experience, in this case the essence of the grading feedback process (Merriam & Tisdell, 2016, p. 26). Described methods of data collection and analysis also demonstrated heuristic inquiry qualities where the “researcher includes an analysis of his or her own experience as part of the data” (p. 227). Finally, the described methods of data collection and related analysis demonstrated imaginative variation qualities by “trying to see the object of study—the phenomenon—from several different angles or perspectives” (p. 227).

As Efron and Ravid (2013) wrote, each strategy provided different types of information and different sources increase our “ability to compare and contrast the information” we collect (p. 67). Taking this approach, the researcher employed triangulation and helped ensure the study’s validity and trustworthiness (Efron & Ravid, 2013). Imaginative variation helped the researcher evaluate and explore the phenomenon of grading feedback from multiple angles and “various perspectives” (Merriam & Tisdell, 2016, p. 27). A discussion of the study’s employed data collection instruments follows.

Survey Selection and Development Process (Background)

The process of identifying survey instruments for measuring instructor efficacy began with a review of currently available survey instrument research and options. Bandura's work on self-efficacy and his associated instrument are widely referenced resources and significantly influenced the researcher's selection process. According to Bandura, individual perceptions of self-efficacy reside in beliefs associated with one's capability to produce and achieve specific, identified goals and objectives (Bandura, 1997). In 1997, Bandura developed a self-efficacy survey instrument that has since been used and adapted by a wide range of researchers and for a variety of research purposes. Bandura has also shared extensive guidance on the development of self-efficacy scales. For purposes of this study, Bandura's (2006) "Guide for Constructing Self-Efficacy Scales" served as a valuable resource.

Instructor Surveys

Self-administered survey questionnaires included a variety of questions (seeking both quantitative and qualitative data).

Michigan Nurse Educator Sense of Efficacy for Online Teaching Scale (MNESEOT). For the pre- and post-intervention surveys, participants completed an adapted form of the Sense of Efficacy for Online Teaching Scale (the Michigan Nurse Educator Sense of Efficacy for Online Teaching Scale [MNESEOT]; Robinia, 2008). This survey was initially revised from the Teacher's Sense of Efficacy Teaching Scale (Tschannen-Moran & Hoy, 2001), a valid and reliable survey instrument, to more accurately reflect a higher education learning environment.

The developer of MNESEOT, Robinia, sought and received permission to use the Teachers' Sense of Efficacy Scale (TSES) efficacy tool from Dr. Hoy, one of the developers of Tschannen-Moran and Hoy's Teacher's Sense of Efficacy Teaching Scale (Robinia, 2008). Robinia subsequently revised the original survey instrument "to more accurately reflect a higher education environment" (Robinia, 2008, p. 66). The MNESEOT contains 32 "questions concerning online teaching in the areas of student engagement, instructional strategies, classroom management, and use of computers" (Robinia, p. 80). An additional 28 background questions (participant age, gender, years of teaching, years of online teaching, discipline, etc.) gather demographic-related information. A copy of the MNESEOT is included in Appendix E of this paper. Participants are asked to answer 32 individual questions based on a confidence scale response system with ratings from 1 ("Nothing") to 9 ("a Great Deal") including a prefix of "I can do..." (Robinia, 2008, p. 158).

The MNESEOT incorporates original subscales which "include efficacy in student engagement, efficacy in instructional strategies, efficacy in classroom management, and efficacy in use of computers" (Robinia, 2008, p. 73). Mean scores from each the "subscales are totaled for an overall total MNESEOT score" (Robinia, 2008, p. 73). Modified subscale nomenclatures include "efficacy for online teaching" and "efficacy for using a computer to teach online" (Robinia, 2008, p. 89). Robinia found that "[t]he use of the MNESEOT instrument with four components intended to measure self-efficacy for online teaching proved reliable" (2008, p. 124). Robinia further found that "similar results from the MNESEOT2 instrument suggests that a two factor component is also appropriate for studying online teaching in a higher education environment"

(Robinia, 2008, p. 124). Robinia conducted a pilot study and confirmed reliability and validity.

Although developed with nurse educators' in mind, the tool serves as a valuable resource for measuring Sense of Efficacy for Online Teaching (also referred to throughout this work as Educators' Sense of Online Teaching Efficacy and Overall Online Teaching Efficacy) more generally. As the MNESEOT was designed to measure nurse educators' sense of efficacy for online teaching, minor modifications to questions removed references to nurse educators and nursing. Background questions were also revised to better suit this study's site university and context. The resulting instrument is hereinafter referred to as the Educator Sense of Efficacy for Online Teaching Scale ("ESEOT").

Collective Teacher Beliefs Tool. With the goal of learning more about the impact of the study's intervention and professional development opportunities on collective efficacy, instructors also completed the Collective Teacher Beliefs Tool, focusing on the six instructional strategies questions only. The Collective Teacher Beliefs Tool survey was administered both pre- and post- intervention (see Appendix F), along with the ESEOT survey (see Appendix G).

The Collective Teacher Beliefs Tool includes an "assessment of the collective perception of the school's capacity for student discipline, as well as for instructional practices" (Tschannen-Moran, n.d., p. 1). The questionnaire is designed to help researchers better understand the types of issues and circumstances that create challenges for teachers (Tschannen-Moran, & Barr, 2004). The Collective Teacher Beliefs Tool is comprised of 12 questions, although for this study only the six instructional strategies

questions were shared with participants. Sample questions include: How much can teachers in your school do to produce meaningful student learning?; How much can teachers in your school do to help students master complex content?; How much can teachers in your school do to promote deep understanding of academic concepts?; and How much can teachers in your school do to help students think critically? Respondents were asked to provide an opinion on each question, based on a confidence scale response system with ratings from 1 “None at all” to 9 “a Great Deal” (Tschannen-Moran, n.d., p. 1). All six instructional strategies questions are included in Appendix H to this study.

While an overall Collective Teacher Efficacy score can be computed by taking a mean of all 12 items, for this study participants only completed the questions exploring collective efficacy and instructional strategies as those had the potential to answer the study’s research questions. To determine the Collective Efficacy in Instructional Strategies subscale scores, the researcher computed “a mean score of the items that relate to” that factor (Tschannen-Moran, & Barr, 2004). In terms of reliability, “[f]or 6 item instructional strategies scale, $N = 49$ middle schools, Cronbach’s Alpha = .96” (Tschannen-Moran, & Barr, 2004).

Construct validity of the Collective Teacher Efficacy Scale was established using factor analysis (Tschannen-Moran & Barr, 2004). The scale developers identified two strong factors that were moderately correlated (Tschannen-Moran & Barr, 2004). After conducting a second order factor analysis, the instrument developers found that the two factors formed a single factor (Tschannen-Moran & Barr, 2004). In terms of reliability, for the six item instructional strategies scale, $N = 49$ middle schools and Cronbach’s Alpha = .96 (Tschannen-Moran, & Barr, 2004).

Instrument Permissions. Permissions to use each scale were sought and obtained, with copies of provided permissions included as Appendix I. The scales had been tested for validity, reliability, and factor analysis. Together, the two survey tools provided quantitative data that had the potential to answer the study's Research Question 1 on instructor teacher efficacy and Research Question 2 on collective teacher efficacy.

Demographic Questions. Demographic questions (i.e., age, gender, number of online courses taught, department/major, education, full/part-time status) were included in instructor survey questionnaires.

Open-Ended Questions. The post-intervention instructor survey included five additional open-ended questions. Open-ended questions focused on experiences with grading, grading feedback, and the web-based comment bank. These open-ended questions yielded qualitative data that had the potential to answer the study's research questions (Research Questions 1, 2, and 3) exploring instructor efficacy, attitudes, and perceptions of the grading feedback process as well as instructor ability to provide quality grading feedback.

Document Review, Researcher-Generated Documents

As discussed earlier in this chapter, participants were invited to comment on the intervention. Comments on the intervention were the subject of ongoing document review. Specifically, the web-accessible comment bank supported user comments and participating instructors were encouraged to submit comments, feedback, and questions on all accessed, reviewed, and utilized comment bank documents. By embedding Google Tools in the feedback bank, the researcher captured comments and discussions at the point of user-interaction with the intervention. As a researcher-generated document

“prepared by the researcher or for the research by participants after the study has begun” (Merriam & Tisdell, 2016, p. 174), these comments were later analyzed through coding and cataloging in order to better understand the development of the comment bank over time, including how it changed as a result of collaboration with both instructors and students. Merriam and Tisdell (2016) explained that the “specific purpose for generating documents is to learn more about the situation, person, or event being investigated” (p. 174). Analyzing how the comment bank changed as a result of contributions and instructor/student comments and questions helped the researcher learn more about the grading feedback process for the benefits of both instructors and students. Collecting this type of data helped the researcher better understand ongoing interactions and ideas related to the intervention and its impact on both instructor efficacy and perceptions of the grading feedback process.

As a participant and researcher, the researcher also captured and documented personal observations throughout the study. Merriam and Tisdell (2016) wrote that the “purpose of phenomenological reduction is to lead the researcher back to the experience of the participants and to reflect on it” so that the researcher both suspends judgment and lives within the experience of the phenomenon of both receiving and providing grading feedback so as to “get at its essence” (p. 27). Qualitative data analysis followed an iterative, reflective process that went through many cycles of revision (Merriam & Tisdell, 2016).

All faculty contributions, comments, and questions were similarly documented and analyzed throughout the data collection process. Notes, comments, and questions were also analyzed so as to document learning, thinking patterns, collaboration, and

revisions. Patterns, trends, and learning were used to refine and further develop the feedback bank. Identified patterns, trends, and associated learning will also inform ongoing development of the bank, including adaptations and content additions for different assignment types and grading tasks, in the future.

Informal Conversations and Interviews

Informal conversations and interviews were conducted synchronously and online using both the phone and Zoom. Questions are included in Appendix I of this paper. All conversations and interviews were virtual due to the geographic locations of study participants. The researcher took notes during all interviews and documented reflections at the conclusion of each interview. Doing so increased the researcher's familiarity with the data. The researcher also prepared and wrote analytical memos throughout the data collection process.

All participants worked and taught online. Conducting conversations and informal interviews in this manner mirrored the way the participants worked and communicated on a daily basis. Informal conversations and interviews were used given their potential to provide the additional data that addressed the research questions examining instructor experiences with grading feedback. Survey respondents were encouraged to participate in informal interviews (conducted either on the phone or via a virtual room using the Zoom platform). Volunteers represented a diverse mix of characteristics, including gender, age, online teaching experiences, and subjects/courses taught. This approach supported maximum variation in the sample which "allows for the possibility of a greater range of application by readers or consumers of the research" (Merriam & Tisdell, 2016, p. 257).

Contributions were analyzed as data was gathered, using redundancy and saturation as guides.

Triangulation and Rigor

Obtaining data through a number of distinct methods (i.e., surveys, observations, informal interviews, and document analysis) and sources (i.e., instructor survey population as well as follow-up communications/interviews with a sub-group of survey participants) helped ensure the researcher obtained a more complete response to the research questions. Doing so also helped ensure, through triangulation, both the validity and trustworthiness of the collected and analyzed data (Efron & Ravid, 2013; Merriam & Tisdell, 2016).

For example, administered surveys contained a mix of closed-ended and confidence-scale questions, as well as several open-ended questions. Qualitative questions were included so that participants could share their personal opinions, concerns, and questions. Qualitative questions were also included so that the researcher could better identify and explore patterns in responses. Qualitative data in the form of broad open-ended questions (e.g., obtained through surveys and/or informal conversations and interviews) were employed in order to tap into the “subjective meanings that individuals in the schools ascribe to their actions and experiences” (Efron & Ravid, 2013, p. 47). The next section provides more detail on the described intervention and its development and use in this study.

Intervention Development Procedure

In this research study, a web-based feedback comment bank was designed, developed, and maintained with the hopes of improving the online grading feedback

process. In doing so, an observed problem was reflected upon and alternative ways the problem might be addressed were considered. A web-based collaborative feedback comment bank was selected as an intervention given its unique potential to both integrate and share a rich combination of pedagogy, tools, collaborations, and technologies in support of instructor and student learning experiences. Dana and Yendol-Hoppey (2020) write on the power and importance of collaboration as well as the potential to magnify outcomes “when a group of teachers work together toward a common goal” (p. 83). This study’s intervention both supported and encouraged ongoing collaboration through participant input and related ongoing iterations to the comment bank.

In its prototype and first presented format, the feedback comment bank included several broad categories of comments. The first category of feedback comments addressed written discussion board posts. The second category of comments focused on digital presentations. The third category of feedback comments addressed written assignments. Another category included comments addressing grammar and APA format. Each category included a minimum of 100 initial comments (see Table 1.1). Initial comments addressed both content correction as well as feedback nuances regarding tone, bias, word choice, feedback versus advice, connotation, communication, growth versus fixed mindset feedback, and other related qualitative feedback characteristics.

The intervention was developed based on assignment expectations, available rubrics, and anticipated student questions. The comment bank was hosted on a freely available website designed and developed for purposes of this study (see <https://www.thefeedbackbank.com/>), with individual comments accessible and available for download in a variety of formats (Google Docs, RemNote documents, PDF, and

Word). Instructors also had the option to download sets of comments for ease of use in grading feedback.

Table 3.3 *Initial Feedback Bank Content (Sample Categories)*

Discussion Board Posts	Written Assignments	Digital Presentations	Grammar & APA Format
General structure	References format (APA)	Power point basics	Punctuation
Writing and style	Citation format (APA)	References format (APA)	Subject-verb tense consistency
Format (APA)	Writing and style	Citation format (APA)	Spelling
Tone	Promoting reflection	Slide notes	In-text citations
Introduction posts	Interactive resources	Working memory	References
Participation posts	Support resources	General reminders to support reliability and validity	Authors
Academic integrity	Staying informed	Organization	Paraphrasing
Grammar	General reminders to support reliability and validity	Tone	Academic integrity
Encouraging metacognition	Encouraging metacognition	Encouraging metacognition	Proofreading
Promoting reflection	Tone	Encouraging reflection	Title page
General reminders to support reliability and validity	Organization	Writing and style	Commas
For late submissions: Time and stress management resources	For late submissions: Time and stress management resources	For late submissions: Time and stress management resources	Academic writing

Participants were encouraged to share feedback, comments, and questions on the comment bank's content and design. Survey links were embedded in the site. Informal interviews and conversations were ongoing. Participants were also invited to submit additional comments for inclusion in the bank. A linked Google Form invited comment submissions by category. As participant feedback and input were received, the bank was continuously updated. At the time data collection stopped, the feedback bank had over 1,560 comments. The intervention's associated image gallery, which grew to over 200 feedback-related graphics and images throughout the term, is not included in this data.

Google Suite tools (Sheets, Docs, Forms, and Sites) were used to develop and grow the comment bank. All resources and features were hosted on a website designed for purposes of the study. The web-based resource supported user comments and questions. The hosting site also included a library of professional development articles and research focused on grading feedback.

Weekly emails included information regarding updates to the intervention, associated video tutorials, and a link to the feedback bank, embedded suggestion surveys, and supporting resources. Collaboration and opportunities to share experiences and challenges were important as “[t]hrough collaboration with others, teacher inquirers find a crucial source of energy and support that keeps them going and sustains their work” (Dana & Yendol-Hoppey, 2020, p. 84). Professional development sessions and informal discussions were desirable from a constructionist perspective, and a belief that grading feedback is a topic that instructors and students should talk about with each other, but often do not (Merriam & Tisdell, 2016, p. 114). The comment bank was updated to reflect participant discussions and associated feedback. Training materials prepared for

each of the three 30-minute professional development webinars and associated open discussions were uploaded and posted on the comment bank's host site.

Each time a participant accessed the comment bank, web-based features prompted users to take notes, track time spent using the bank, submit new comments, and document associated reflections. Individual instructor notes were collected and analyzed throughout the duration of the study. At the end of week 10 of the study, a thank you email with a link to a closing survey was sent to all participating instructors. Reminder emails were sent 1 and 2 weeks after the initial thank you email was sent. The post-intervention survey included several additional open-ended questions. Open-ended questions focused on experiences with grading, grading feedback, and the comment bank. The open-ended questions yielded qualitative data that had the potential to answer the study's research questions exploring online instructor efficacy and attitudes and perceptions of the online grading feedback process. The Table 3.4 provides an overview of the study's procedure.

Table 3.4 *Study Chronology and Data Collection*

Pre-Term	<ul style="list-style-type: none">-Call for Participation Email-Completion of Pre-Intervention Survey / 30-minute Professional Development Webinar on Online Grading Feedback / Comment Bank Introduction-Participants complete brief, open-ended survey at conclusion of virtual Professional Development Webinar-Follow-up email with link to feedback bank resources
Weeks 1-3	<ul style="list-style-type: none">-Weeks 1-3 / Day 1: Participant Email Reminder and Link to Feedback Bank-Open discussions on the intervention and grading feedback-Updates to comment bank based on participant input
Week 4	<ul style="list-style-type: none">-Day 1: Participant Email Reminder and Link to Feedback Bank-Open discussions on the intervention and grading feedback-30-minute Professional Development Webinar-Participants completed brief, open-ended survey at conclusion of virtual Professional Development Webinar-Updates to comment bank based on participant input
Weeks 6-7	<ul style="list-style-type: none">-Day 1: Participant Email Reminder and Link to Feedback Bank-Open discussions on the intervention and grading feedback-Updates to comment bank based on participant input
Week 8	<ul style="list-style-type: none">-Day 1: Participant Email Reminder and Link to Feedback Bank-Open discussions on the intervention and grading feedback-Updates to comment bank based on participant input-30-minute Professional Development Webinar-Participants completed brief, open-ended survey at conclusion of virtual Professional Development Webinar
Week 9	<ul style="list-style-type: none">-Day 1: Participant Email Reminder and Link to Feedback Bank-Virtual Chats: Open discussions on the intervention and grading feedback-Updates to comment bank based on participant input
Weeks 10 and 11	<ul style="list-style-type: none">-Week 10 Day 7 / Week 11, Day 1: Participant Thank You Email with Link to Post-Intervention Survey-Email to participating instructors with link to post-intervention survey

The following section describes the data analysis methods used in this study.

Data Analysis Methods

Quantitative survey data such as closed-ended and Likert-type survey questions were analyzed using descriptive and inferential statistics and professional software such as Excel. Qualitative survey data such as open-ended questions were analyzed by coding and identifying themes in participant responses. All analysis was performed using professional software, including Miner Pro Lite. Qualitative data from informal participant conversations and interviews, post-professional development webinar surveys, and field notes were transcribed, coded, and analyzed (see Table 3.5). A thematic approach identified emerging and generated themes. As earlier noted, obtaining data through a number of distinct sources ensured a more complete response to the study's research questions. Doing so also helped ensure, through triangulation, both the validity and trustworthiness of the data (Efron & Ravid, 2013).

Table 3.5 *Data Collection and Purpose*

Research Question 1	Pre and Post Intervention Survey
Research Question 2	Pre and Post Intervention Survey
Research Question 3	Post Intervention Survey, Informal Interviews, Participant Conversations, Professional Development Webinar Surveys, Document Analysis

The following discussion explains conducted data analysis in more detail.

Quantitative Surveys

Quantitative data (i.e., closed-ended and confidence-scale survey questions) were analyzed using descriptive statistics and in accordance with instructions provided by the developers of each adopted survey instrument. Survey data from the pre- and post-

intervention surveys were compared and analyzed. The researcher used a variety of additional statistics to further analyze survey data. For example, the researcher employed correlation matrices between different research variables at two points in time (before and after the term/use of the study intervention) and repeated-measures *t* tests (to test differences between research variables amongst the same two groups of individuals at two points in time; Mertler, 2017). Analysis was performed using professional software.

Adopted and adapted pre- and post- intervention surveys had been tested for both validity and reliability. By ensuring rigorous validity procedures for adopted instruments, the researcher strengthened this study's credibility (Creswell & Miller, 2000; Mertler, 2017). When questioning to collect qualitative data, the researcher never lost sight of the reality that "answers" are inevitably "heavily shaped" by the questions that are asked (Taylor, 2016). Patton (2015) noted that "ultimately. . . the trustworthiness of the data is tied directly to the trustworthiness of those who collect and analyze the data—and their demonstrated competence" (as cited in Merriam & Tisdell, 2016, p. 260). The researcher remained always mindful of this point and, at each step of the study, reflected upon and took care to ensure clear and accurate explanations, informed consent, and participant confidentiality. Further, for all qualitative data, collection and analysis were part of "a *simultaneous* process in qualitative research" (Merriam & Tisdell, 2016, p. 195). In particular, collection and analysis were ongoing, "recursive and dynamic" (p. 195). The following sections further document and describe analysis for each of the qualitative types of collected data. As earlier noted, at all times, the researcher conducted the "study in as ethical a manner as possible" (Merriam & Tisdell, 2016 p. 265).

Open-Ended Survey Questions

Qualitative data from open-ended surveys administered at the conclusion of each of the three professional development webinars was transcribed, coded, and analyzed for emerging and/or generated themes. Qualitative data from open-ended survey questions was coded and analyzed for themes. The researcher was primarily interested in information reflected in the data that might indicate a change in instructor perceptions and attitudes associated with the grading feedback process. Thus, the researcher coded all data by hand and used QDA Miner Lite software in a manner that examined words and phrases associated with perceptions and attitudes of the grading feedback process. In doing so, the researcher examined participants' own language to identify themes (Saldaña, 2016). All analysis was performed using a mix of both by-hand and with QDA Miner Lite professional software.

Researcher/Participant Generated Document (Content) Analysis

Participant and researcher notes, contributions, comments, and questions on comment banks were documented, coded, and analyzed throughout the study as a means of documenting learning, thinking patterns, collaboration, and revisions. The researcher established basic descriptive categories for inductive coding continuously throughout the research process and in connection with each type of qualitative data collected in connection with this study. The researcher adopted a form of content analysis to “better understand meaning, assess the nature of the data, and possibly measure the frequency and variety of message” (Merriam & Tisdell, 2016, p 179).

Data analysis occurred along with data collection. Quotes from questions and posted comments were used to illustrate the classification of each theme. Instructor

contributions, comments, and questions were analyzed for emerging trends and/or generated themes. Patterns, trends, and learning were used to refine and further develop the feedback bank (and for different assignment types and grading tasks in the future).

Informal Conversations and Interviews

Informal conversations and interviews took place throughout the duration of the study. The researcher took notes to document all such conversations and would later clarify and/or ask any questions that arose after review of the content of an informal interview. Member checking served as an “important way of ruling out the possibility of misinterpreting the meaning of what participants say and do” (Merriam & Tisdell, 2016, p. 246). Interviews were transcribed, coded, and analyzed. QDA Miner Lite software was used. A thematic approach helped identify themes generated through interviews.

Qualitative data from informal interviews and conversations with participants were transcribed, coded, and analyzed for emerging and/or generated themes. All analysis was performed using a mix of both by-hand and QDA Miner Lite professional software. Here, the researcher sought “to understand the particular in depth, not to find out what is generally true of the many” (Merriam & Tisdell, 2016, p. 254). Quotes from interviews were used to illustrate theme classifications. A phenomenological approach to interviewing explored participant experiences with grading and feedback. A thematic approach identified emerging and/or generated themes, with the goal of depicting “the basic essence or basic structure” of the online teaching and learning, grading, and grading feedback experience for instructors and students (Merriam & Tisdell, 2016, p. 26).

Reflexivity, Trustworthiness, and Rigor

As Merriam and Tisdell (2016) wrote, “[n]o classroom teacher...will want to experiment with a new way of teaching...without some confidence in its probable success” (p. 237). The described methods of data collection and subsequent analysis were all designed to increase study trustworthiness and rigor. Ethical issues, including “reciprocity to participants for their willingness to provide data, the handling of sensitive information, and disclosing the purposes of the research” were all considered in depth and detail (Creswell & Plano Clark, 2018, p. 181). The researcher conducted all research in an ethical manner and adopted appropriate “rigor in carrying out the study” (Merriam & Tisdell, 2016, p. 237). The researcher always kept in mind that “answers” are inevitably “heavily shaped” by the questions that are asked (Taylor, 2016). When interviewing, collecting, and analyzing data, the researcher remained hyperaware and mindful of the many influences that could impact the “ordinary” voices of others during data collection (Taylor, 2016). Thus, the researcher employed ongoing reflection and consideration of not only the language used, but also researcher positionality, reflexivity, and bias throughout all steps and stages of the research study.

For the qualitative aspects of this study, the researcher adopted and adapted different types of strategies in order to establish both trustworthiness and authenticity. These strategies were “[b]ased on worldviews and questions congruent with the philosophical assumptions underlying” the qualitative research perspective (Merriam & Tisdell, 2016, p. 238). Specifically, the researcher took care to convey the importance of a research topic, share acknowledgment of their role as a researcher, clarify their relationship to those studied, and offer clarity and transparency in conveying how the

study was conducted (Merriam & Tisdell, 2016). Data was gathered in a systematic manner that supported preservation of data (Creswell & Plano Clark, 2018). Similarly, the researcher worked to actively acknowledge and explain their “biases, dispositions, and assumptions regarding the research to be undertaken” (Merriam & Tisdell, 2016, p. 249).

Throughout this study, the researcher conducted data analysis in a variety of ways, including applying triangulation (whether through multiple data collection methods, sources of data, investigators, or theories), researcher reflexivity, member checking, collaboration, an audit trail, and thick, rich description (“statements that produce for the readers the feeling that they have experienced, or could experience, the events being described in the study;” Creswell & Miller, 2000, p. 129). The researcher also actively watched for both saturation as well as variation in the data and participant “understanding of the phenomenon” (Merriam & Tisdell, 2016, p. 248). Similarly, the researcher actively sought for alternative explanations of collected data as well as “purposefully” sought data “that might disconfirm or challenge your expectations or emerging findings” (p. 249).

Plan for Reflecting with Participants on Data

The researcher provided opportunities for participants to review and discuss collected data. These opportunities were made available at the conclusion of the study and on an ongoing basis throughout the study’s duration. The researcher plans to continue to create opportunities for ongoing learning, iterative updates and improvements to the study intervention, and reflection on findings associated with the intervention and its impact on grading processes and content. Specifically, the bank will continue to be

available to all participants and any other interested instructors. The researcher will maintain and continue to update the bank with new comments and resources. Periodic meetings will provide ongoing opportunities for reflection and intervention design and use.

Devising an Action Plan

The researcher incorporated and applied all participant feedback to continued iterations and improvement of the web-based feedback bank throughout the study's duration. Comments were, and will continue to be, added and updated on an ongoing and iterative basis. Beyond the study, access to the intervention will be scaled more generally to additional populations and online instructors. Opportunities to document and share study findings and participant experiences, through written and oral format, will be explored as well. The web-based collaborative feedback bank will be continuously updated and shared with broader online teaching populations on an ongoing basis. The intervention and associated study findings will also be shared with administration at the researcher's workplace as well as other colleges and universities with increasingly online instruction and programs so that the intervention can be incorporated into instructor resources and support materials. The researcher plans, as well, to engage in additional study of the potential impact of the intervention on student online learning efficacy and in new instructor contexts to better understand impact of the intervention on instructor online teaching efficacy as well as collective teacher efficacy.

Summary

This chapter discussed and explained the study's mixed-methods methodology, the constructions of the study's associated research questions, and the related research

design. The chapter explained how participants (both students and instructors) were identified, contacted, and recruited for participation. The chapter also detailed the study's multiple instruments and processes for collecting triangulated data associated with both the feedback comment bank's collaborative development and its use by instructors and students. Finally, the chapter described the process by which obtained data was analyzed. Issues of validity, reliability, trustworthiness, and rigor were considered and addressed throughout the chapter.

CHAPTER 4

PRESENTATION AND ANALYSIS OF DATA

Overview

This chapter explores the findings of this mixed-methods action research study's data collection procedures as well as the associated findings and answers to the study's research questions. The chapter begins with an overview and introduction to the study and its three research questions. The chapter next provides a description of the study's intervention, methods, and general findings and results. Thereafter, the chapter presents a detailed summary and analysis of the data collected throughout the entirety of the study. The chapter concludes with an interpretative discussion and analysis of the collected data as it related to the study's research questions as well as a wrap-up regarding study findings.

Introduction

In general, grading feedback, whether delivered in a face to face or online environment, is simultaneously characterized as one of the most important but most challenging aspects of teaching and education (Hattie, 2012b; Tierney, 2013). Hattie and Clarke (2019) have written extensively of grading feedback as an important and influential force, but also one of the most variable of influences on student growth and learning. Hattie and Clarke (2019) also wrote of the potentially positive as well as the potentially negative influences of provided feedback. While grading feedback may be among the most powerful influences on how, and how well, students learn, the challenges

are complex and multi-faceted. Literature documents challenges such as time, stress, and ambiguity (Tierney, 2013).

There are questions of equity and bias in grading, as well (Schinske & Tanner, 2014; van Ewijk, 2011). For example, research has consistently found that grading practices vary greatly across and within schools and programs (Feldman, 2018; Kohn, 1999). In one research example, Guskey (2006) explored educators' recollections of their own student experiences with grading. Data collected through questionnaires revealed that nearly 70% of all educators recollected negative experiences in college level courses (Guskey, 2006). Further, in a significant majority of studied cases, recollections conveyed perceptions "of unfair treatment or personal bias on the part of their professors or instructors" (p. 1). While Guskey (2006) explored personal experiences, the identified problems of bias and discrimination in grading extend broadly, through the present day (Feldman, 2018; Kohn, 1999; Schinske & Tanner, 2014; van Ewijk, 2011).

Relatedly, instructors (and practitioner faculty in particular) often receive little formal training on pedagogically sound grading practices. As a result, "most simply reflect back on what was done to them and then, based on those experiences, try to develop policies and practices that they believe are fair, equitable, defensible, and educationally sound" (Guskey, 2006, p. 1). However, when practices are systemically flawed and biased, as research suggests grading feedback processes often are (Feldman, 2018; Kohn, 1999), modeling prior experiences simply perpetuates the status quo. Moreover, "feminist scholarship has taught us that technological innovations alone do not make structural changes" (Balsamo et al., 2013, p. 6). Innovations in grading via online

teaching platforms and learning management systems does not exempt online grading feedback from this very real challenge.

Extensive research on feedback has identified specific characteristics of quality feedback. For example, and while phrasing may vary depending upon context as well as the researcher-writer, in general, quality, effective feedback is specific, timely, goal-oriented, shared clearly for the purpose of personal growth, and intentionally involves learners in the process (Stenger, 2014). Providing quality grading feedback that effectively and comprehensively incorporates desired and recommended characteristics is not without challenges and debate. Scholars, educators, and practitioners agree that questions of feedback are both challenging and highly contentious throughout most, if not all, of higher education (Boud & Molloy, 2013; Nilson, 2015). Others have documented evidence that “suggests that feedback practices in higher education are often not to an adequate standard” (Thomas & Oliver, 2017, p. 39). Issues of grading, distinct from grading feedback, pose a similarly “controversial and emotional topic in many ways” (Chapman & King, 2012, p. 127). Despite, or perhaps in spite of, its value for learning, grading feedback persists as an unresolved and complicated issue throughout higher education (Denton & McIlroy, 2018; Nicol, Thomson, & Breslin, 2014).

Challenges associated with providing timely, actionable, individualized, and supportive grading feedback persist for both instructors and students. Sources of such challenges and factors associated with negative influences on the part of provided feedback are varied and complex. As one example, instructors and students have both experienced and shared persistent challenges associated with self-efficacy, grading feedback expectations, and associated confidence in their abilities to achieve goals related

to online learning and instruction. This was additionally reflected in the researcher's own experiences.

In response to the challenges, scholars have long sought a variety of strategies and tools to provide additional instructor and student support, more quality feedback, and grading efficiencies. One such option, and the focus of this action research study, is a web-based grading feedback comment bank. In particular, the problem addressed in this action research study involved the challenges online instructors and students encounter in connection with the grading feedback process and an associated exploration of the impact of an intervention designed to address said problem.

Research Questions

To further understand the identified problem of practice and explore tools and strategies that might improve online instructor efficacy as well as attitudes and perceptions associated with the grading feedback process, this action research mixed-methods study explored the following research questions:

Research Question 1: How does the use of a web-based grading feedback comment bank impact online instructor's teaching efficacy?

Research Question 2: How does the use of a web-based grading feedback comment bank impact collective teacher efficacy within an online university?

Research Question 3: How does the use of a web-based grading feedback comment bank impact online instructors' attitudes and perceptions of the grading process?

Purpose of the Study

As noted, researchers and educators have long studied and sought tools to support instructors in the grading feedback process. Scholars have explored a variety of options to offer additional instructor and student support, more quality feedback, and grading efficiencies. One such option, and the focus on this action research study, is a collaborative, web-based feedback comment bank. In particular, the problem addressed in this action research study involved the challenges online instructors and students encounter in connection with the grading feedback process and the purpose of this mixed-methods action research study was to better understand the impact of one such intervention on instructor online teacher efficacy (individual and collective) and instructor attitudes and perceptions of the online grading feedback process. The study intervention was a web-based feedback comment bank that was hosted on an original website designed for purposes of this study. Participants had ongoing access to the intervention, along with three supporting professional development webinars, throughout the course of a Summer 2020 teaching term. The intervention was dynamic and grew (both with respect to content and features) throughout the course of the study. Growth responded directly to participant feedback and data shared through surveys and documents administered and developed throughout the study's term.

General Study Findings and Data Analysis

This section presents the general findings of this research study. A detailed analysis of all data and findings follows the summary overview of collected data.

Pre- and Post- Intervention Survey Questionnaire Data

The quantitative data collected in this research study derived from a pre- and post-intervention survey shared with participants at the beginning and end of the 12-week study and associated graduate and undergraduate terms at the researcher's site university. The pre- and post-questionnaires consisted of an adapted version of the (a) Sense of Efficacy for Online Teaching Scale (the Michigan Nurse Educator Sense of Efficacy for Online Teaching Scale [MNESEOT]; Robinia, 2008) and (b) Collective Teacher Beliefs Tool (six instructional strategies questions only). The MNESEOT was initially revised from the Teacher's Sense of Efficacy Teaching Scale (Tschannen-Moran & Hoy, 2001) and, in adapted form, referred to throughout this study as the ESEOT. Both the pre- and post-survey questionnaires included a variety of statements and responses. Participants answered survey questions by selecting from options presented on a Likert or a Likert-type scale.

The ESEOT portion of the pre- and post-intervention surveys (see Appendix G) included 32 questions. The Collective Efficacy in Instructional Strategies included six questions. Two additional questions, one to measure instructor online grading self-efficacy and one to measure likelihood of use and implementation, were added to the pre-intervention survey. Two analogous questions, one to measure instructor online grading self-efficacy and one to measure likelihood of use and implementation of the comment bank, were also added to the post-intervention survey. In addition, five open-ended questions were included in the post-intervention survey in order to learn more about participant attitudes and perceptions of the intervention and the grading feedback process. Finally, one additional closed-ended question to evaluate time spent interacting with the

feedback comment bank throughout the course of the study was added to the post-intervention survey. Both the pre- and the post-intervention survey collected instructor demographic information, as well.

In total, 18 instructors completed the pre-intervention survey and 12 instructors completed the post-intervention survey. One explanation for the comparatively limited response rate to the post-intervention survey might be attributed to the contingent nature of study participants. All but one participant was an adjunct faculty member and, as a result, participants may not have been actively checking university email after the conclusion of the term and at the time the post-intervention study was administered. The post-intervention survey was administered after the teaching term ended and participants who were not scheduled to teach in the following term may have ceased checking electronic university-based communications on a consistent basis.

Notably, participants who did not complete the post-intervention survey were not scheduled to teach in the subsequent term. Another factor that may have impacted limited responses to the post-intervention survey is, as explored throughout the study, the challenges associated with available time and the time-intensive nature of providing grading feedback and end of term grading responsibilities, in particular. Because the post-intervention survey was administered immediately after the close of a teaching term and the associated submission of final grades, challenges such as limited time and fatigue may have impacted response rates. Moreover, the administration of the post-intervention survey coincided with an end of summer break in the university calendar. Finally, the post-intervention survey (like the pre-intervention survey) was long, with over 70

questions (both quantitative and qualitative). Length and associated time to complete may have also hindered completion rates.

To address these challenges and increase response rates in future research, participants' personal emails might be collected for purposes of communication. In addition, the time period during which the post-intervention survey is available might be extended and also scheduled to deploy during a naturally less busy time in the academic calendar and year. Finally, additional reminders, via email or otherwise, to complete the survey might be shared. Another factor that may have contributed to the limited response rate on the post-intervention survey involves the study's multiple means of data collection. As earlier discussed, data collection was ongoing throughout the entirety of the study. A post-webinar 3 survey, with open-ended questions, had been administered 2 weeks prior to the post-intervention survey. Additionally, informal conversations were ongoing, as was the documentation of comments shared via surveys embedded in the intervention. As such, participants may have believed they had shared all feedback and thoughts in other instruments administered throughout the study. In future research, additional reflection on balance and the timing of all data collection instruments might lead to a higher post-intervention survey response rate.

Results from the pre- and post-intervention surveys were analyzed using descriptive and inferential statistics, online statistical analysis programs, and in accordance with directions for scoring each of the MNESEOT (and, by extension, the ESEOT) and the Collective Teacher's Efficacy Scale (the Collective Efficacy in Instructional Strategies, in particular). For the ESEOT, responses were solicited along a nine-point continuous scale. Categories included responses that ranged from "Nothing",

“Very Little”, “Some”, “Quite A Bit”, and “A Great Deal” (scoring based on 1 through 9, respectively). According to the tool’s scoring instructions, the higher the cumulative score on the scale, the greater the sense of efficacy for that aspect of online teaching (Robinia, 2008; Tschannen-Moran, n.d.). By calculating the means of the subscales and adding these means, the researcher calculated an overall online teaching efficacy score between 4 through 36. Higher scores indicate a greater respective and overall teachers’ sense of efficacy for online teaching than do lower scores (Robinia, 2008; Tschannen-Moran, n.d.).

Subscales for each of Efficacy in Online Student Engagement, Efficacy in Online Instructional Practices, Efficacy in Online Classroom Management, and Efficacy in Use of Computers subscale scores were calculated based on the following scoring formula (Robinia, 2008; Tschannen-Moran, n.d.). Scoring instructions each of the four efficacy subscales follow:

Efficacy in Student Engagement

Add Score from Items: $1 + 2 + 4 + 6 + 9 + 12 + 14 + 22 =$

Total Score divided by 8 to get mean score

Efficacy in Instructional Strategies

Add Score from Items: $7 + 10 + 11 + 17 + 18 + 20 + 23 + 24 =$

Total Score divided by 8 to get mean score

Efficacy in Classroom Management

Add Score from Items: $3 + 5 + 8 + 13 + 15 + 16 + 19 + 21 =$

Total Score divided by 8 to get mean score

Efficacy in Use of Computers

Add Score from Items: $25 + 26 + 27 + 28 + 29 + 30 + 31 + 32 =$

Total Score divided by 8 to get mean score

Collected Data and Results

The following two sections present a detailed summary of all paired pre- and post-intervention survey results for each of the aforementioned surveys, focusing on the 12 participants who completed both the pre- and post- intervention surveys. A statistical analysis, including exploratory inferential analysis, of these results is also shared.

ESEOT Pre-Intervention Survey. The researcher calculated the Efficacy in Online Student Engagement, Efficacy in Online Instructional Strategies/Practices, Efficacy in Online Classroom Management and Efficacy in Use of Computers subscale scores for each individual participant and on an overall basis. The researcher also calculated the overall median and the standard deviation for each item identified within the ESEOT section of the pre-intervention survey. As earlier noted, 18 participants completed the pre-intervention survey and twelve participants completed the post-intervention survey. As a result, for the remainder of this section, paired pre- and post-intervention survey data ($n = 12$) is presented and analyzed. Figures 4.1 through 4.4 illustrate pre-intervention sub-scale scores.

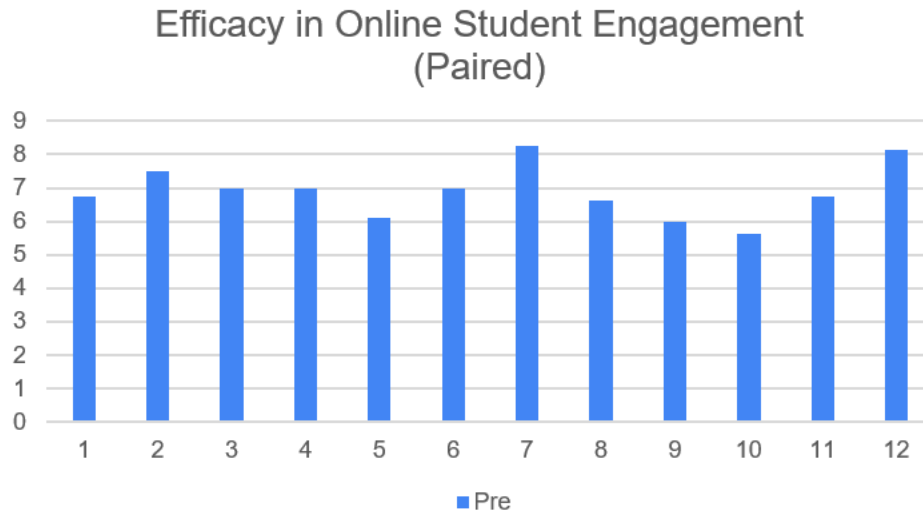


Figure 4.1 *Participant Efficacy in Online Student Engagement Pre-Test*



Figure 4.2 *Participant Efficacy in Instructional Strategies Pre-Test*

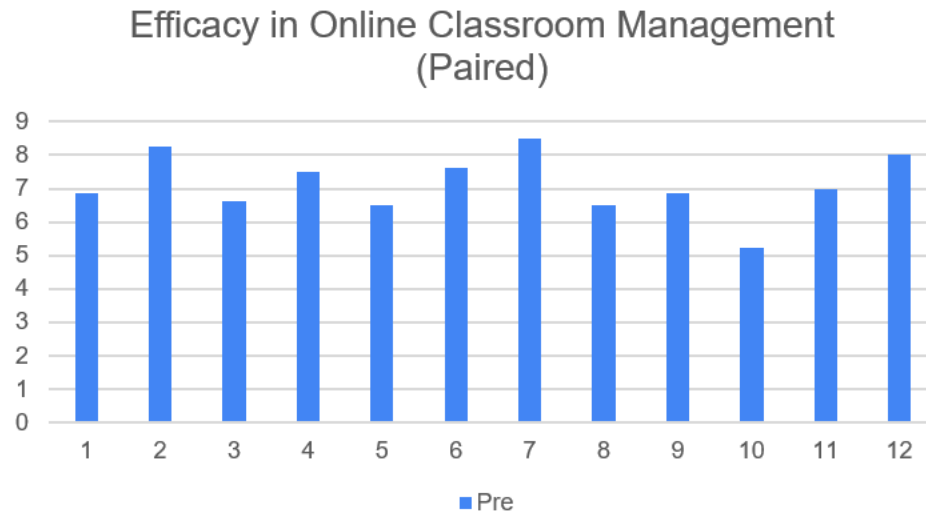


Figure 4.3 *Participant Efficacy in Classroom Management Pre-Test*

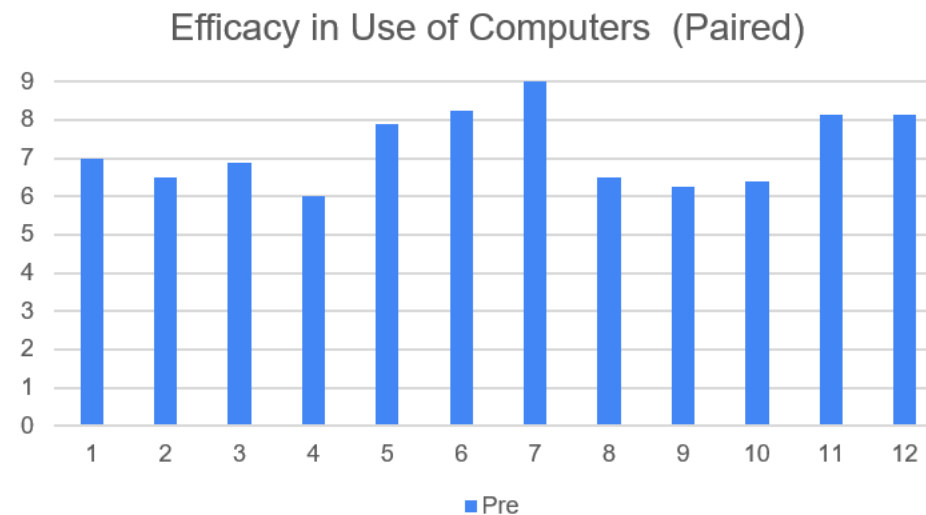


Figure 4.4 *Participant Efficacy in Use of Computers Pre-Test*

ESEOT Post-Intervention Survey. The researcher calculated the Efficacy in Online Student Engagement, Efficacy in Online Instructional Strategies/Practices, Efficacy in Online Classroom Management and Efficacy in Use of Computers subscale scores for each individual participant and on an overall, paired basis as part of the post-intervention survey analysis. The researcher also calculated the median and standard

deviation for each item identified within the ESEOT section of the post-intervention survey (see Table 4.1). Each subscale had a maximum of nine, with an overall possible Educator Sense of Efficacy in Online Teaching score between 4 and 36.

Table 4.1 *Post-Intervention Measures of Central Tendency Efficacy Subscales (n = 12)*

Section	Mean	Median	SD
Efficacy in Online Student Engagement	6.94	6.625	.84
Efficacy in Online Instructional Strategies/Practices	7.41	7.31	.59
Efficacy in Online Classroom Management	7.51	7.44	.66
Efficacy in Use of Computers	7.65	7.81	.79
Overall Online Teaching Efficacy Score	29.51		

Figures 4.5 through 4.8 illustrate post-intervention sub-scale scores.

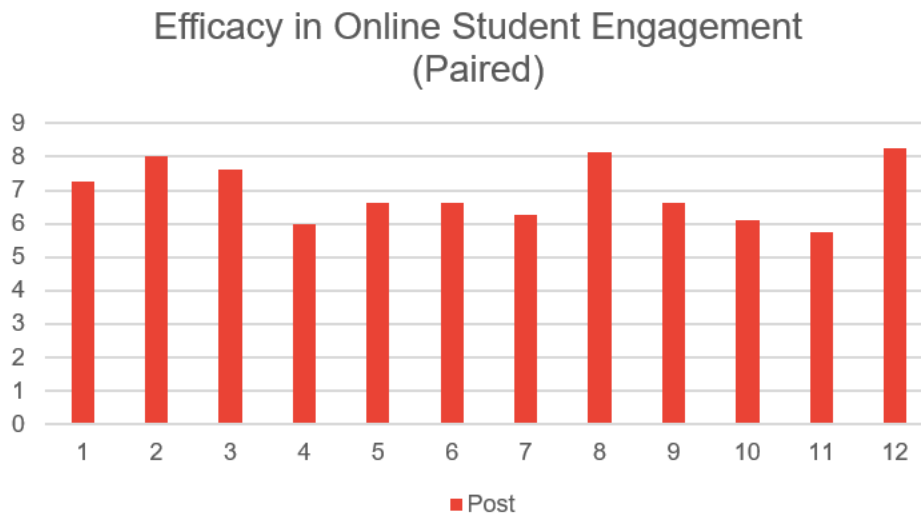


Figure 4.5 *Participant Efficacy in Online Student Engagement Post-Test*

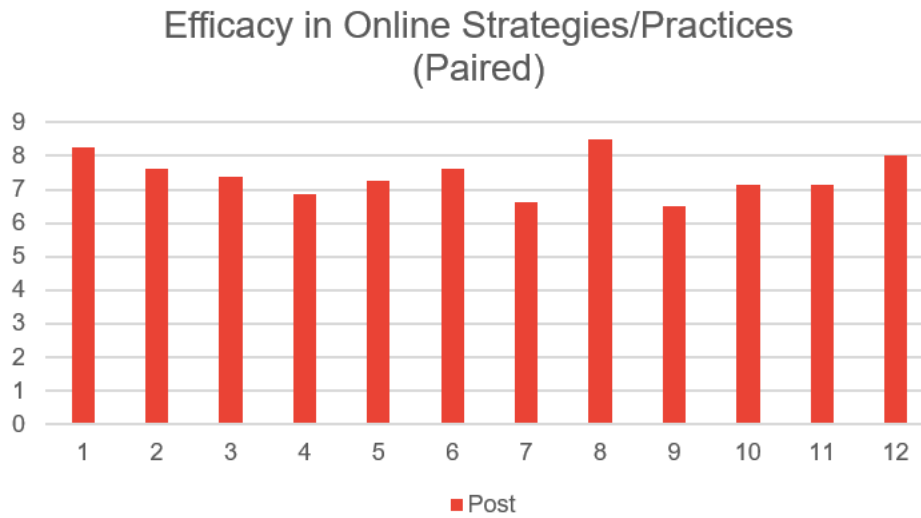


Figure 4.6 *Participant Efficacy in Instructional Strategies Post-Test*

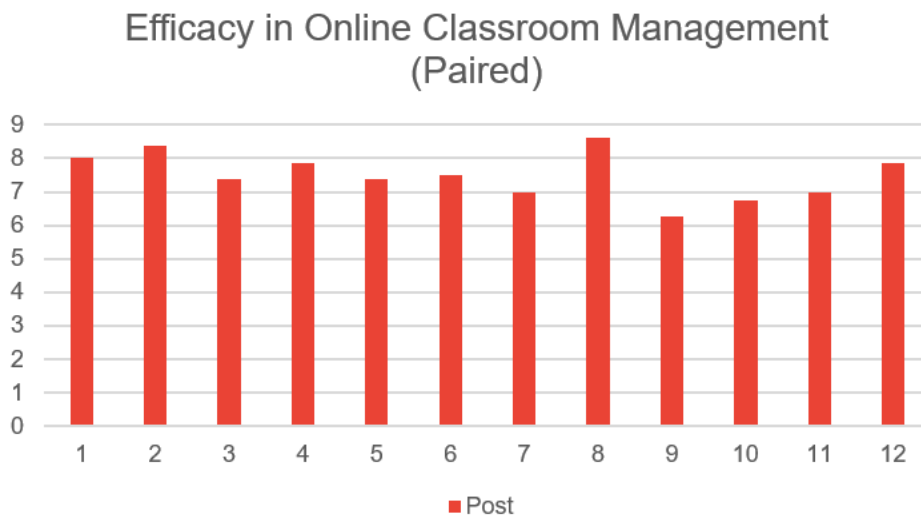


Figure 4.7 *Participant Efficacy in Classroom Management Post-Test*

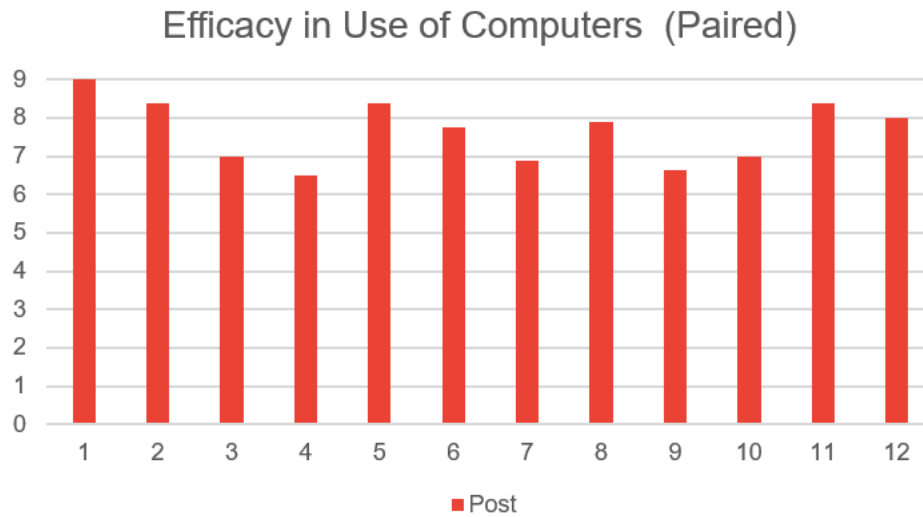


Figure 4.8 *Participant Efficacy in Use of Computers Post-Test*

ESEOT Analysis and Interpretation

This section presents an analysis and interpretation of the pre- and post-intervention ESEOT data and results. Figure 4.9 presents paired pre- and post- ESEOT scores (possible range from 4 to 36) on an overall, paired basis. Blue indicates pre-intervention values, whereas red indicates post-intervention values. Table 4.2 presents ESEOT subscales and overall ESEOT on a pre- and post-intervention, paired numerical basis. Figure 4.10 presents the pre- and post-intervention ESEOT overall subscale scores. Figures 4.11 through 4.14 present pre- and post- intervention ESEOT subscale scores by participant, on a paired basis.

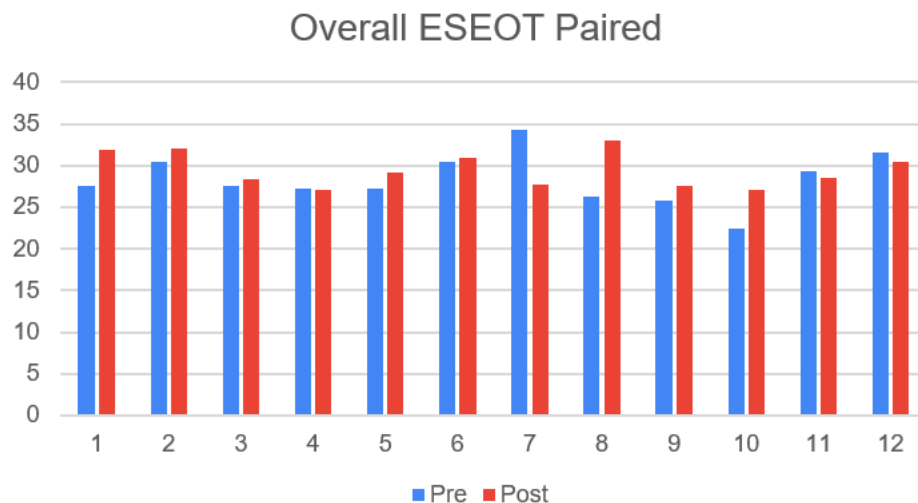


Figure 4.9 Paired Pre- and Post- ESEOT Scores

Table 4.2 ESEOT and Subscales, Pre- and Post- Paired ($n = 12$)

Efficacy Subscales	Pre-	Post-
Efficacy in Online Student Engagement	6.89*	6.94*
Efficacy in Online Instructional Strategies/Practices	7.06*	7.41*
Efficacy in Online Classroom Management	7.125*	7.51*
Efficacy in Use of Computers	7.23*	7.65*
Overall Online Teaching Efficacy Score	28.305*	29.51*

Note. * Mean

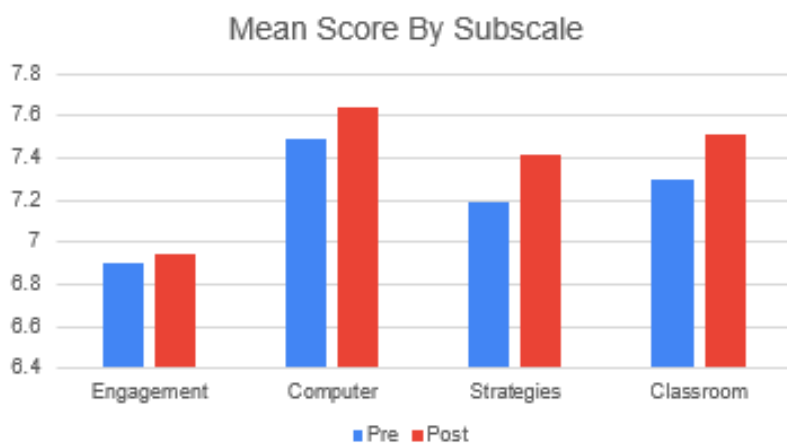


Figure 4.10 Educators' Sense of Online Teaching Efficacy, Pre and Post Subscales

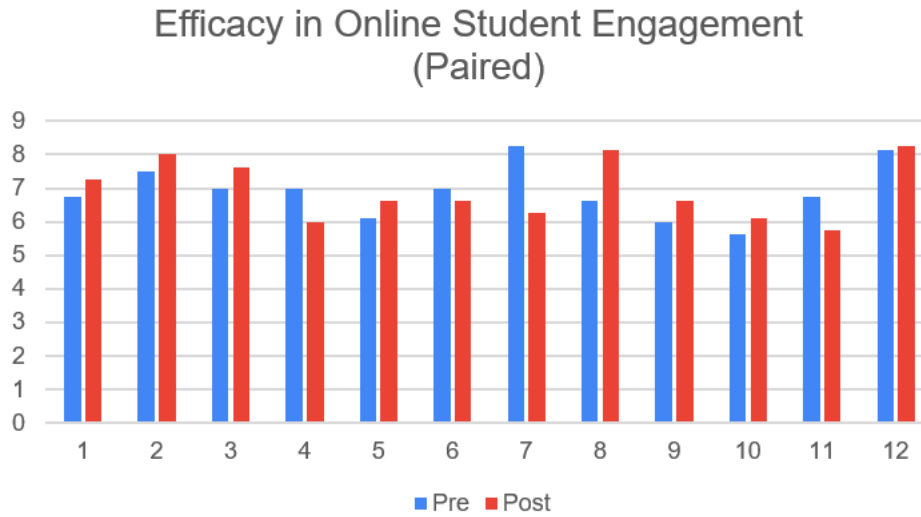


Figure 4.11 *Pre- and Post- Efficacy in Online Student Engagement, Paired*

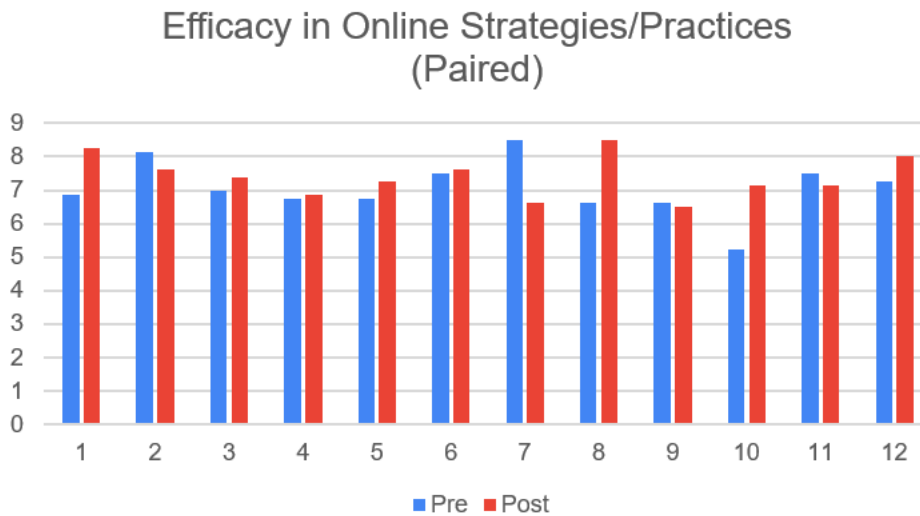


Figure 4.12 *Pre- and Post- Efficacy in Online Strategies/Practices, Paired*

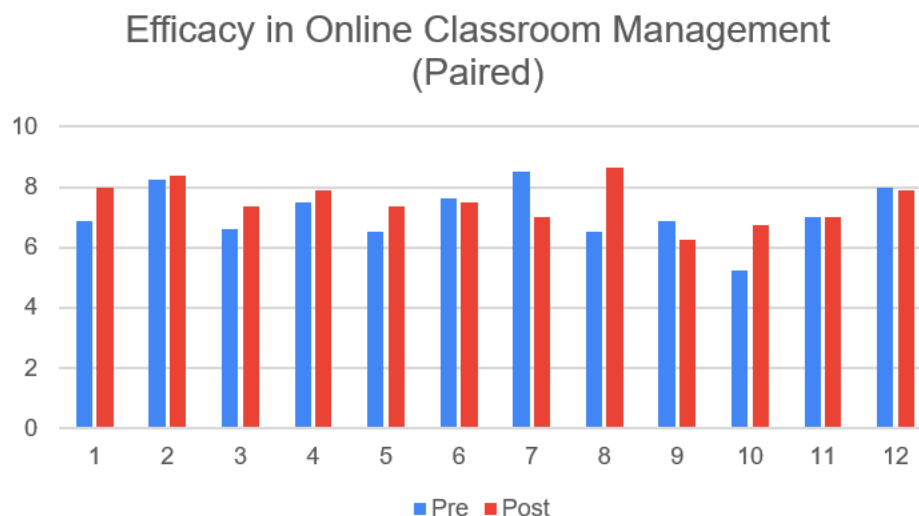


Figure 4.13 *Pre- and Post- Efficacy in Online Classroom Management, Paired*

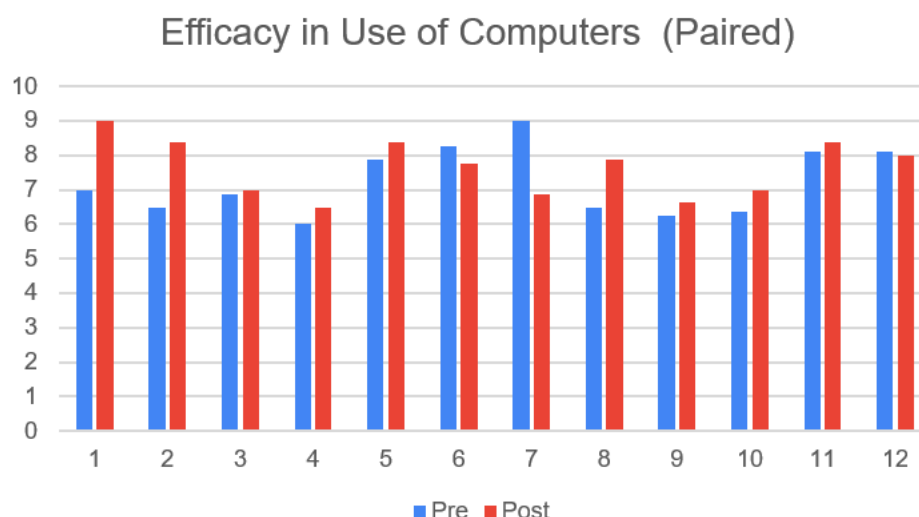


Figure 4.14 *Pre- and Post- Efficacy in Use of Computers, Paired*

The researcher took the average (mean) scores for each of the eight questions in each of the four subscales (paired across the 12 participants who completed the post-intervention survey) and evaluated the difference between the average of the pre- and the average of the post- intervention results for statistical significance, on an exploratory basis. The researcher relied upon inferential statistics in order to assess and evaluate the

likelihood that the statistical results would apply more broadly to a larger population of instructors (Mertler, 2017). In order to assess whether the difference in the pre- and post-intervention means was statistically significant, the researcher calculated a p value, which is an indication of the probability of change occurrences in the study's data (Mertler, 2017). The calculated p value was compared with an alpha level of 0.05, which is standard in educational research contexts (Mertler, 2017). For a p value of less than the designated alpha of 0.05, statistically significant differences are noted (Mertler, 2017).

The researcher ran a repeated-measures t test on each individual subscale (mean) as well as the overall Online Teaching Efficacy score (mean), based on paired responses to each individual question in the pre- and post-intervention survey. The researcher also ran a repeated-measures t test on individual subscales (mean), based on paired responses at the sub-scale level in the pre- and post-intervention survey.

ESEOT subscale resulting p values were as follows: Efficacy in Online Student Engagement, $p = .88$; Efficacy in Online Instructional Strategies/Practices, $p = .282$; Efficacy in Online Classroom Management, $p = .208$; Efficacy in Use of Computers; $p = .224$; Overall Online Teaching Efficacy, means/subscale level, $p = .252$; and Overall Online Teaching Efficacy, means/question level, $p = .048$. When calculated over 48 responses (mean for each participant for each element of each subscale) 12 participants (paired), $p = .048$. When calculating for the sum of means broken down by sub-scale (Overall Online Teaching Efficacy Score), 12- pre and 12-post, $p = .252$. Finally, when modeling (at a sample size three times the size of the study's current sample) based on the sum of means broken down by sub-scale (Overall Online Teaching Efficacy score), 12- pre and 12-post, $p = .037$. With a p value of .048 (comparing mean scores for paired

participants across all instrument questions), the overall Online Teaching Efficacy scores changed in a positive and statistically significant way. Thus, while the noted changes in participant efficacy in online teaching subscale scores were not statistically significant at the individual sub-scale level, at the Overall Online Teaching Efficacy Score at the question level, a statistically significant result was observed. Additionally, for the .252 p value calculation, (Overall Online Teaching Efficacy Score) the researcher modeled a larger sample size using the same data (12 paired, pre and post were tripled, repeating the same data). In this calculation, a p value of .037 emerged. Seeking to confirm this finding, the researcher plans to re-run the study using a larger sample size in the future.

In sum, overall ESEOT increased across all four subscales and at the Overall Online Teaching Efficacy level. Although statistically significant changes were not observed at the subscale levels, when evaluating for statistical significance on an exploratory basis across the four subscales together (those making up the Overall Teacher Sense of Efficacy for Online Teaching) a statistically significant increase was observed. There are several possible reasons for this discrepancy, including variations in movement (both positive and negative) as a result of increased awareness of the complexity and/or characteristics of quality online grading feedback. In addition, the limited sample size and associated limited power of the data likely contributed to weaker findings. Additional research with a larger sample size is recommended.

It is also important to keep in mind that efficacy itself is neither a linear nor uncomplicated process (Tschannen-Moran, 2014). Rather, efficacy is, in many ways, just as challenging a concept as feedback. Sustainable increases in efficacy often originate with movement and change in both positive and negative directions, with

“implementation dips” a common occurrence (Tschannen-Moran, 2014, p. 250). Self-efficacy beliefs develop and often fluctuate in sometimes unpredictable, “complex and non-systematic” ways (Phan, 2012, p. 205). As such, variation and variability are both expected. Relatedly, it is not surprising that given the complexity of both self-efficacy and feedback as constructs, the interrelationship of the two is also complex, complicated, and variable.

Moreover, the participants in this study all had relatively high levels of pre-intervention efficacy across all four subscales (with pre-intervention online efficacy scores at or above the 76th percentile on each 9-point continuous scale (see Table 4.2). As such, impactful changes to efficacy, including statistically significant changes, are more difficult to realize (as a relative matter). However, the changes to efficacy scores (at both the subscale and overall levels) are encouraging and point to a role for future research in this area. In particular, the researcher plans to pursue further research evaluating the impact of the intervention on a population of new instructors, instructors new to online teaching, and/or instructors who identify as having relatively low levels of self-efficacy for online teaching.

In addition, when modeling data at a sample size triple the researcher’s current paired population of 12 (i.e., a hypothetical sample size of 36 with scores the same as those in this study) statistically significant results were also confirmed. As the overall online teaching efficacy score increased in a statistically significant manner, the potential for the intervention to impact efficacy in a positive manner across all four subscales is promising. Availability and use of the feedback bank intervention led to statistically significant improvements on online teaching efficacy. It is important to note, however,

that given the study's sample size of 12 pre- and post- intervention survey respondents, generalizations are not possible. Rather, these findings are exploratory and can be used to help frame future research.

The researcher also examined individual instructor participant mean and median scores to identify variations (whether increases and/or decreases) across pre- and post-intervention survey responses. Several notable changes were observed. All participants demonstrated movement in their individual subscales. Movement was observed in both positive and negative directions, indicating the potential for the intervention to impact efficacy on the part of users.

For some participants efficacy increased, both globally and by sub-scale. For others, efficacy decreased, also globally and by subscale. Explanations for decreases in subscales are many and include a heightened awareness of the characteristics of quality grading feedback. It is possible that the professional development webinars impacted participants' perceptions and understandings of quality feedback and, perhaps, altered participant beliefs in their ability to successfully provide grading feedback that reflects a range of desired characteristics within given condition constraints such as available time. That is, the more intentionally one thinks about the various types, levels, and characteristics of quality feedback and the more thoroughly one understands its importance on the learning process, the more deeply one can appreciate its multi-layered complexity as well as the ways in which those complex layers impact teaching and learning in both the short and long-term.

In this study, participants with the relatively lower efficacy scores (all participants demonstrated moderate to high pre-intervention efficacy levels) on the pre-intervention

survey tended to show the greatest absolute increases in efficacy when comparing the pre- and post-intervention survey results. For example, participants with the lowest levels of Sense of Online Teaching Efficacy across all four subscales demonstrated the greatest relative increases across all four subscales in the post-intervention survey. The most notable changes were observed in participants that indicated lower levels of online teaching efficacy in the pre-intervention survey. This finding suggests additional study across populations of instructors initially identified as lacking robust senses of online teaching efficacy could be valuable. Also, of note, participants exhibited the greatest efficacy in use of computers in the pre- and post-intervention surveys. This is not surprising given that all courses were taught online at the college at which the participants teach. The study's qualitative data lends greater insights into these results and trends.

Collective Teachers' Efficacy in Instructional Strategies Scale

For the Collective Teachers' Beliefs Tool Scale, the researcher calculated the Collective Efficacy in Instructional Strategies subscale scores by computing a mean score of the statements/items that related to the Collective Efficacy in Instructional Factors. The statements included the Likert scale responses of (1) None at all, (3) Very Little, (5) Some Degree, (7) Quite a Bit, and (9) A Great Deal (Tschannen-Moran, n.d.). The following two sections describe the pre- and post-intervention survey results. A statistical analysis of these results is also presented.

Pre-Intervention Survey. The researcher calculated the mean score of each statement as well as the collective mean for the items that relate to the Instructional Strategies factor. The median and standard deviation were also calculated. Table 4.3

presents the mean and median for Collective Teacher Efficacy in Instructional Strategies on the pre-Intervention survey (for the 12 participants that completed both the pre- and post-intervention survey).

Table 4.3 *Collective Teacher Efficacy in Instructional Strategies (Pre-, Paired, n = 12)*

Instructional Strategy Statements	Mean	Median
How much can teachers in your school do to produce meaningful student learning?	7.92	8
How much can your school do to get students to believe they can do well in schoolwork?	7.75	8
How much can teachers in your school do to help students master complex content?	7.75	8
How much can teachers in your school do to promote deep understanding of academic concepts?	7.75	8
How much can teachers in your school do to help students think critically?	7.5	7
How much can your school do to foster student creativity?	7.42	8
Overall	7.68	7.83

Note. Overall Standard Deviation .647

Post-Intervention Survey Results. The researcher found the mean score of each statement as well as the collective mean for the items that relate to the Instructional Strategies factor. The researcher calculated the associated median and standard deviations, as well. Table 4.4 presents the mean for Collective Efficacy in Instructional Strategies statements on the post-intervention survey.

Table 4.4 *Collective Teacher Efficacy in Instructional Strategies (Post-, Paired, n = 12)*

Instructional Strategy Statements	Mean	Median
How much can teachers in your school do to produce meaningful student learning?	8	8
How much can your school do to get students to believe they can do well in schoolwork?	7.42	8
How much can teachers in your school do to help students master complex content?	7.75	8
How much can teachers in your school do to promote deep understanding of academic concepts?	7.83	7.5
How much can teachers in your school do to help students think critically?	7.58	7
How much can your school do to foster student creativity?	7.5	7.5
Overall	7.68	7.67

Note. Overall Standard Deviation .951

Collective Efficacy in Instructional Strategies Analysis and Interpretation

This section presents an analysis and interpretation of the pre- and post-intervention survey Collective Efficacy in Instructional Strategies (1 through 9 scale) data and results (see Figure 4.15).

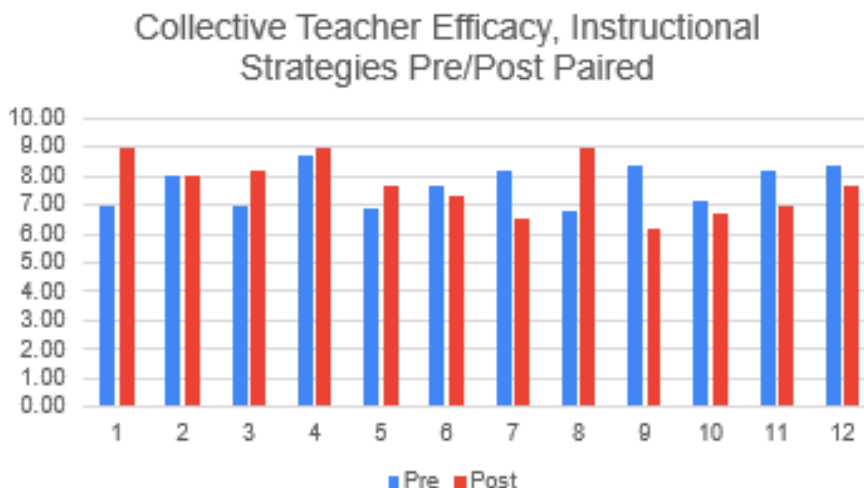


Figure 4.15 *Pre- and Post- Collective Efficacy in Instructional Strategies*

Figure 4.21 compares Collective Efficacy in Instructional Strategies on a pre- (7.68) and post- (7.68) intervention paired basis.

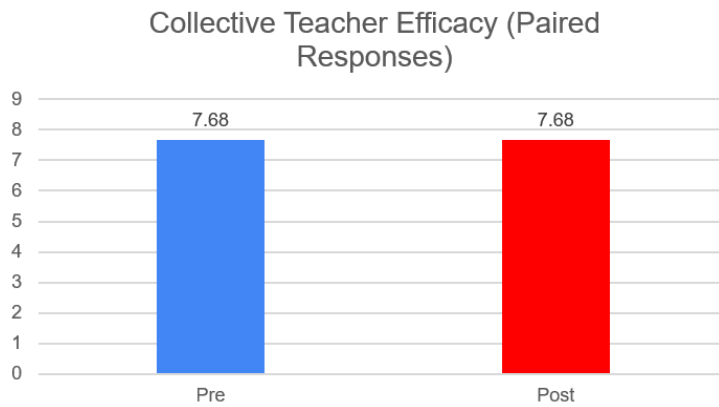


Figure 4.16 *Collective Teacher Efficacy in Instructional Strategies*

The researcher ran a repeated-measures t test on pre- and post-Collective Teacher Efficacy in Instructional Strategies. The resulting p value equaled .99 and, as such, the results were not statistically significant. The researcher also examined individual instructor participant mean and median scores to identify variations (whether increases and/or decreases) across pre- and post-intervention survey responses. Several notable changes were observed. As an example, all but one participant exhibited movement in their Collective Teacher Efficacy in Instructional Strategies scales (with one participant scoring 8 on both the pre- and post- survey). Five participants exhibited increases, six decreases, and one stayed constant. The potential for the intervention to lead to changes is important. Because “beliefs about capability, both at the individual and collective levels, are so powerfully related to teachers’ reactions to the reform measures presented to them and to their motivation to engage in professional learning and adaptive practices” it

remains critically important to “understand the mechanisms by which these beliefs are developed and sustained over time” (Tschannen-Moran & Chen, 2014, p. 254).

Efficacy and Grading Feedback

Two additional questions, one to measure individual instructor efficacy in connection with online grading feedback and one to measure likelihood of use and implementation of the study intervention, were included in both the pre- and post-intervention survey (see Appendix F).

Pre-Intervention Survey.

Question 1:

I am confident in my ability to provide personalized, substantive, and detailed feedback to each student in my course, so that each student receives forward-focused and timely feedback that they can use to improve their work going forward. Figure 4.17 presents participant efficacy in online grading, on a pre-intervention basis.



Figure 4.17 *Efficacy in Online Grading Feedback, Pre-Intervention*

Question 2:

Which of the following statements describes your thoughts and experience(s) with a feedback comment bank when grading? For purposes of this question, a feedback comment bank is a collection of commonly used grading feedback comments. Check all that apply.

Responses ranged, with eight selecting “I currently use a comment bank that I created and developed;” two selecting “I currently use a comment bank that someone else shared with me;” three selecting “I would like to use a comment bank, if it has the content I need;” one selecting “I do not know if I will have any interest in using a comment bank;” one selecting “I do not think a comment bank will help me with my grading;” three selecting “I have never considered using a comment bank to help me with my grading;” and one selecting “I do not know what a feedback comment bank is.”

Post-Intervention Survey.

Question 1:

I am confident in my ability to provide personalized, substantive, and detailed feedback to each student in my course, so that each student receives forward-focused and timely feedback that they can use to improve their work going forward. Figure 4.18 presents participant efficacy in online grading, on a post-intervention basis.

Online Grading Feedback and Feedback Banks

1. I am confident in my ability to provide personalized, substantive, and detailed feedback to each student in my course, so that each student receives forward-focused and timely feedback that they can use to improve their work going forward.

12 responses

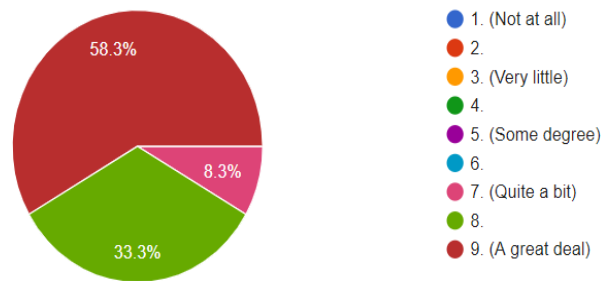


Figure 4.18 *Efficacy in Online Grading Feedback, Post-Intervention*

Whereas in the pre-intervention survey, of respondents indicated “A great deal,” 58.3% of respondents did so in the post-intervention survey. Moreover, in the Post-Intervention Survey, all respondents indicated either 9 - “A great deal” (58.3%) or 8 (33.3%) or “Quite a bit” (8.3%) with 91.6% indicating a score of 8 or 9. In the pre-intervention survey, only 61.1% indicated a score of 8 or 9. Figure 4.19 presents pre- and post- overall Online Grading Feedback Efficacy averages. Figure 4.20 presents Online Grading Feedback Efficacy, pre- and post- paired.

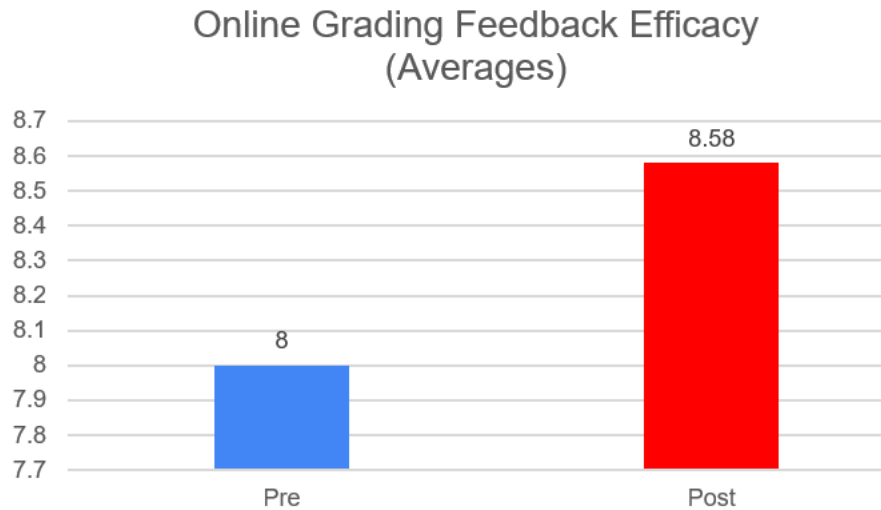


Figure 4.19 *Online Grading Feedback Efficacy, Pre- and Post- (Overall Averages)*

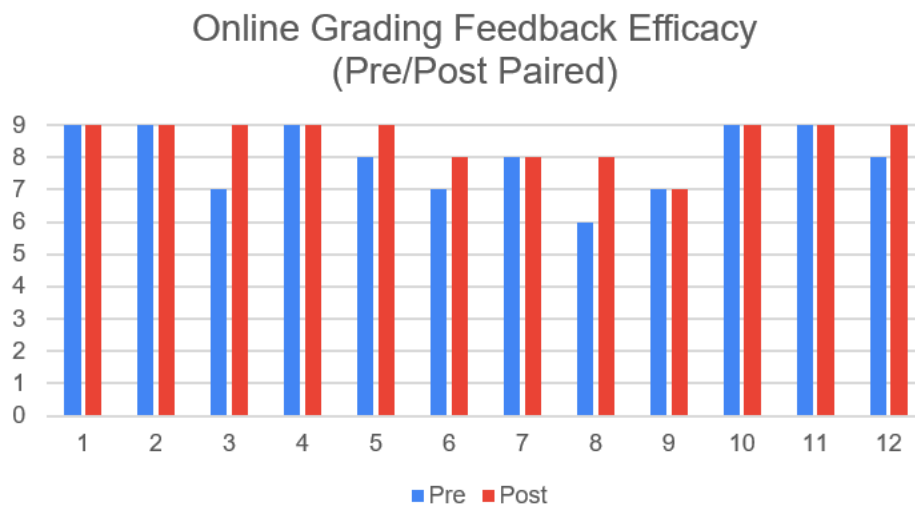


Figure 4.20 *Online Grading Feedback Efficacy, Pre- and Post- (Respondents, Paired)*

The researcher ran a repeated-measures *t* test on the paired pre- (8) and post- (8.58) online grading feedback efficacy findings. Results returned a *p* value of .027, which suggests that the difference in results is significantly significant (pre- and post-). This suggests that the intervention positively impacted instructor Efficacy for Online Grading Feedback and that the increase is not by chance. The intervention led to a

meaningful change in instructor online grading feedback efficacy. However, given the study's small sample size ($n = 12$) this analysis is exploratory only. Additional research with a larger sample size is needed to confirm validity.

Question 2:

Which of the following statements best describes the likelihood that you will use the feedback comment bank shared in conjunction with this research study when grading? Possible responses (listed from top to bottom in Figure 4.21) included: "I have already used the feedback comment bank when grading;" "I intend to use the feedback comment bank for future grading;" "I would like to use the feedback comment bank but it does not have the content I need;" "I don't know if I will have the opportunity to use the feedback comment bank;" "I don't think the feedback comment bank will help me with my grading;" and "Other."

Which of the following statements best describes the likelihood that you will use the feedback comment bank shared in conjunction with this research study when grading?

12 responses

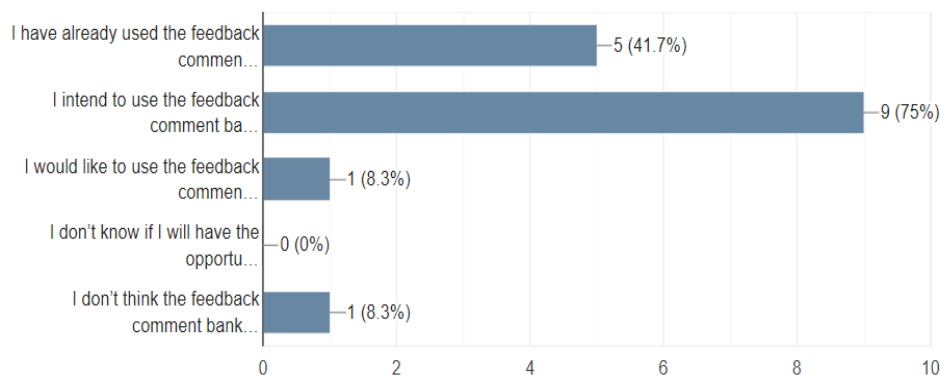


Figure 4.21 Participant Experiences with Comment Banks, Post-

An additional closed-ended question to evaluate time spent interacting with the feedback comment bank throughout the course of the study was included in the Post-Intervention Survey (see Figure 4.22).

Approximately how much time did you spend interacting with the feedback comment bank?

12 responses

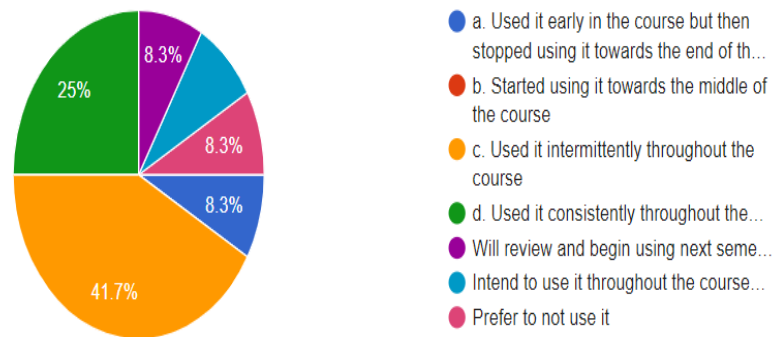


Figure 4.22 *Time Spent Interacting with Feedback Bank*

Survey Analysis and Answers to Research Questions

The pre- and post-intervention survey data yielded insights to Research Questions 1 and 2.

Research Question 1: How does the use of a web-based grading feedback comment bank impact online instructor's teaching efficacy?

Overall ESEOT increased across all four subscales. Moreover, the increase in overall Online Teaching Efficacy was statistically significant ($p = .03$) on an exploratory basis. As such, potential for the intervention to impact efficacy in a positive manner across all four subscales and overall is promising. Additionally, instructor efficacy with

respect to Online Grading Feedback increased in statistically significant ways ($p = .027$), again on an exploratory basis.

Research Question 2: How does the use of a web-based grading feedback comment bank impact collective teacher efficacy within an online university?

Participants' Collective Teaching Efficacy Instructional Strategies also yielded interesting and promising results. While overall levels of Collective Efficacy in Instructional Strategies were stable, several notable changes were observed. All but one participant exhibited movement in their Collective Teacher Efficacy in Instructional Strategies scales (with one participant scoring 8 on both the pre- and post- survey). Five participants exhibited increases, six decreases, and one stayed constant. The potential for the intervention to lead to changes is important. Because "beliefs about capability, both at the individual and collective levels, are so powerfully related to teachers' reactions to the reform measures presented to them and to their motivation to engage in professional learning and adaptive practices" it remains critically important to "understand the mechanisms by which these beliefs are developed and sustained over time" (Tschannen-Moran & Chen, 2014, p. 254).

Post-Intervention Survey, Open-Ended Questions

Eleven open-ended questions were added to the Post-Intervention Survey to learn more about participant attitudes and perceptions of the intervention and the grading feedback process. Questions included:

1. What are your current thoughts about the use of a grading feedback bank?

2. Which of the following statements best describes the likelihood that you will use the feedback comment bank shared in conjunction with this research study when grading?
3. Approximately how much time did you spend interacting with the feedback comment bank?
4. How did you use the feedback comment bank throughout the session?
5. Tell me about your impressions of the feedback comment bank.
6. How do you feel about the grading process when using the feedback comment bank?
7. Do you consider the feedback comment bank a useful tool when providing grading feedback on discussion boards? How? Why?
8. Do you consider the feedback comment bank a useful tool when providing grading feedback on written assignments? How? Why?
9. Do you consider the feedback comment bank a useful tool when providing grading feedback on assignments involving case law? How? Why?
10. Please feel free to type in any other comments related to your experiences or perceptions of teaching courses online.
11. Please feel free to type in any other comments related to your experiences or perceptions of the online grading feedback process.

Responses to these questions constituted additional qualitative data that was coded and analyzed for emerging and/or generated themes. The Post-Intervention Open-Ended Question Survey data yielded insights into Research Question 3.

Post-Webinar Survey Data

Open-ended surveys were administered at the conclusion of each of the study's three professional development webinars. The researcher received a total of 13 responses to the post-webinar 1 survey, a total of eight responses to the post-webinar 2 survey, and a total of eight responses to the post-webinar 3 survey. Qualitative data collected from these surveys was transcribed, coded, and analyzed for emerging and/or generated themes. Using coding tactics described in Merriam and Tisdell (2016) and Crabtree and Miller (1999), as well as tenets of phenomenology and grounded theory, the researcher employed an iterative process of codebook development to develop codes and categories for further analysis. The post-webinar survey data also yielded insights into Research Question 3.

Document Review and Participant/Instructor Generated and Developed Documents

Throughout the entirety of the study, participants were invited to comment on the intervention. Comments on the intervention were the subject of an ongoing document review. Specifically, the web-accessible comment bank supported user comments and participating instructors were encouraged to submit comments, feedback, and questions on all accessed, reviewed, and utilized comment bank documents. All faculty contributions, comments, and questions were similarly documented and analyzed throughout the data collection process. Notes, comments, and questions were later analyzed in order to better understand and capture learning, thinking patterns, collaboration, and revisions. Patterns, trends, and learning were used to refine and further develop the feedback bank (and for different assignment types and grading tasks in the future). Relying upon the Google Suite of products, the researcher captured comments

and discussions at the point of user-interaction with the intervention. As a researcher-generated document, a document “prepared by the researcher or for the research by participants after the study has begun”, these comments were later analyzed through inductive coding and cataloging to better understand the development of the comment bank over time including how it changed as a result of collaboration with both instructors and students (Merriam & Tisdell, 2016, p. 174). Participant generated comments were submitted through the intervention over the course of the study. Qualitative data collected from participant generated comments was transcribed, coded, and analyzed for emerging and/or generated themes.

Collaborations and Shared Suggestions

Participants also generously shared thoughts on the types and nature of comments they would find useful in the bank. As the bank was updated, participants shared their experiences associated with use of the bank. Participants also shared ideas for new comment types and features. For example, user-driven updates included a global search function, a Chrome extension for one click search and paste, a Kudos category of comments, Outreach templates and sample language, a Favorites link, an About/Updates page, home page quotation, links to APA formatting video tutorials, separate sections for different formatting styles, among many others.

Informal Conversations and Interviews

Throughout the study, a number of observations, informal conversations, and informal interviews yielded additional insights and data regarding the perceptions and attitudes of faculty participants towards (a) the online grading feedback process and (b) the study’s intervention, a web-based feedback comment bank. This data yielded further

insights into Research Question 3 and all data collected in this manner also was analyzed for emerging themes.

Researcher Observations

As a participant and researcher, the researcher also captured and documented personal observations throughout the entirety of study. Merriam and Tisdell (2016) wrote that the “purpose of phenomenological reduction is to lead the researcher back to the experience of the participants and to reflect on it” so that the researcher both suspends judgment and lives within the experience of the phenomenon of both receiving and providing grading feedback so as to “get at its essence” (p. 27). Observations originated from webinar feedback and comments, participant-interaction with the feedback bank, as well as informal participant communications during the course of the study. Research observations yielded insights into Research Question 3 and were also evaluated for emerging themes.

Interpretation of Results from the Study

Research Question 1

Analysis of quantitative ESEOT survey data revealed overall increases in Efficacy in Online Student Engagement, Efficacy in Online Instructional Practices, Efficacy in Online Classroom Management, and Efficacy in Use of Computer subscale scores, as well as in overall Online Teaching Efficacy. Movement at the individual instructor level varied by participant. Statistically significant increases in Educator’s Sense of Online Teaching Efficacy were observed. However, given the study’s sample size these findings are exploratory only. Analysis of participant response data regarding Online Grading Efficacy also revealed a statistically significant change, again on an exploratory basis.

Research Question 2

Analysis of quantitative Collective Teaching Efficacy survey data revealed stable results in Collective Teacher Efficacy in Instructional Strategies. Movement at the individual instructor level varied by participant. No statistically significant change in Collective Efficacy in Instructional Strategies was observed.

Reflection and Analysis

While the findings revealed statistically significant changes in Educators' Sense of Online Teaching Efficacy and Online Grading Efficacy, no statistically significant changes were observed in Collective Efficacy in Instructional Strategies. However, beyond the noted measures of statistical significance, there is much to be learned from the data. Scholars have long noted persistent challenges with instructor self-efficacy. Similarly, cultivating and nurturing efficacy amongst teachers, both individually and collectively, in online and face to face settings, has never been a linear or "straightforward" (Tschannen-Moran, 2014, p. 250). Rather, scholars have long identified a so-called "implementation dip" (Tschannen-Moran, 2014, p. 250) in individual and collective efficacy beliefs as instructors undergo and undertake initiatives related to efficacy changes (Hoy & Burke-Spero, 2005; Ross, 1994; Stein & Wang, 1998).

As Timperley and Phillips (2003) have suggested, "the change process is likely to be an iterative rather than a sequential one, where change in beliefs, actions or outcomes are both shaped by, and built on, each other" (p. 630). Thus, despite, or perhaps as an indicator of, the iterative process of change in this context, the study findings are promising in that observed and documented changes in beliefs are indicative of the iterative process commonly seen in connection with the cultivation of efficacy beliefs in

instructors. Changes in efficacy levels at the participant level suggest that the intervention could be used successfully to motivate and initiate movement in instructor self- and collective-efficacy levels. Given the non-linear nature of changes in efficacy, the noted movement is promising and worthy of further exploration.

More specifically, self-efficacy for educators' sense of online teaching increased for eight participants, decreased for three participants, and remained stable for one participant. Relatedly, collective teacher efficacy in instructional strategies increased for five participants, decreased for six participants, and remained stable for one participant. There are a variety of reasons why efficacy levels might move down, rather than up. For those for whom instructor efficacy went down, one possibility is a deeper awareness and appreciation of the challenges (bias, potential negative influences, time for quality feedback) associated with feedback. For example, Kearney and Sheffer (2015) wrote that "[e]xperience suggests that we are often wrong in our assessments of how well students are learning" (para. 6). It is possible that the study experience contributed to heightened awareness of opportunities to improve in connection with the quality and nature of provided feedback.

Research Question 3 / Qualitative Analysis and Emerging Themes

Analysis of all collected qualitative data and research findings revealed eight major sets of emerging themes reflective of participant perceptions and attitudes of the grading feedback process and the study intervention along with supporting professional development. Contributions were analyzed as data was gathered, using redundancy and saturation as guides. To view emerging themes associated with each individual data

collection instruction, see Appendix J. Overall, the following eight themes emerged from all collected qualitative data (see Figure 4.23).



Figure 4.23 *Emerging Themes*

More Positive Feelings / Less Negative Feelings. Participant responses consistently expressed additional enjoyment, joy, and enthusiasm associated with the grading feedback process and availability and use of the feedback comment bank. As an example, responses to post-webinar surveys included comments such as “I am enjoying much better with the availability of the feedback bank!,” “I really liked the idea of having a sheet of fun filled images that we could post along with our grading. I believe that would create more fun for us, as well as, the students. Great thought!,” and “I am enjoying online grading more since I have been a participant in this study!” The post-intervention survey’s open-ended questions included comments such as “I am more

confident in providing appropriate feedback,” “I really like it. The bank is a useful tool,” and “I’m looking forward to using it as a resource and sharing it with faculty who struggle with Feedback.”

Analogously, participants consistently reiterated the often exhausting and stressful nature of the grading feedback process with comments such as “I agree it is exhausting and sometimes frustrating,” “It is very time-consuming and sometimes exhausting,” “necessary but cumbersome process,” “takes too long,” and expressed mitigation of such feelings as a result of use of the intervention. For example, one participant stated that “if feedback banks were not used the ‘This is Insane...’ would be very appropriate” while another noted “Some of it becomes labor intensive, especially after several weeks of feedback that is seemingly ignored as the same issues are still appearing.”

Participants also noted associated positive feelings as a result of the tool’s ability to alleviate some of the time-intensive aspects of grading as well as associated stress and fatigue. One participant indicated that “using a feedback bank will reduce the time that I spend providing constructive feedback” while another noted that “The online feedback bank is good and universities should actually tailor them to a specific class to facilitate faster grading.” Moreover, participants conveyed appreciation for newly implemented features (e.g., “Thanks for incorporating the suggestions thus far!”). Comments on global search functionality, a Chrome extension (“user friendly”) and images (“loved the fun images to include in grading”) highlighted positive feelings associated with ease of use, responsiveness on, and benefits associated with formatting edits implemented to streamline and enhance overall usability including individual user experiences and readability. Throughout the course of the study, participants shared a wide range of

suggestions and recommendations for new features and comment types. Most if not all recommendations and suggestions were implemented the same week a participant shared a suggestion, thereby increasing the possibility that participants could experiment with the updates and share their related experiences. Examples of user-driven updates included kudos-related feedback (and an associated survey comment where a participant shared “The kudos comments are really useful for me, thanks for adding them!,” “Thanks for adding the KUDOS category!” and positive, feedback-related images (“I thought the memes links were a great addition”).

Participant comments also expressed positive feelings associated with both the implementation and availability of the features for use when grading. New features yielded similar responses. For example, in response to participant desire for search functionality, a global search feature was implemented. A comment later indicated “the search really makes it user friendly.” A one-click Chrome extension soon followed. A later participant comment stated: “I think the search feature and then being able to click the comment and it auto copy is very cool!” Another shared that “[t]he Case Brief generator is a great idea. I like the inspirational quote. I think the Generator looks amazing!”

Expanded Visions of Feedback. Multiple, if not most, participants also expressed more awareness and appreciation for both the complexity and range of feedback that might be provided in a particular context. Participants indicated that exposure to new comments (including types, wording, and phrasing) were helpful and also commented on deeper understanding of different types, levels, and examples of feedback as well as on the value of modeling and the importance of consistency. Several

instructors expressed value in exposure to comments in areas with relative less personal expertise is helpful. Sample participant comments included “It is a supportive resource for when I get stuck with the need to respond to an unusual situation and or a rubric element I am uncomfortable with,” “Being exposed to how others demonstrate feedback,” and “I’m finding the comments on grammar and APA very helpful. It’s not my area and I am using them to improve my feedback on student writing.” Another participant spoke on the value of the intervention for ideas and options especially when working with a new group of students. For example, an instructor might know they want or need to share feedback that addresses a particular topic, perhaps grammar, writing, or formatting, yet sometimes do not know where to begin. Participants consistently referenced the bank as a source of ideas and inspiration, while another shared “It is nice to read other people’s comments.”

Participant responses indicated that availability, review, and use of the comment bank supported an expanded vision and understanding of the complexity and breadth of feedback. In many ways, responses suggested an expanded vision of feedback, both what it is and what it has the potential to be. For example, one participant wrote that

It is nice to read other people’s comments and to see that you are not along in some of your issues. Other people have the same issues. It takes more of the “What Am I doing Wrong” feeling away. I believe if you really care about what you are doing, there is a tendency to look at yourself first rather than take things in stride as a part of an issue.

Another wrote “There is a lot of information in there and ideas to help formulate feedback types and feedback levels,” while another suggested a ratings or most used feature so that instructors could learn from other instructor use patterns and practices.

Participant feedback/comments and applications highlighted the multiple and varied uses of the bank. The open access nature spawned ideas such as pre-course videos, course overviews regarding expectations—one participant developed videos using the resources in the bank—and different ways of thinking about feedback as a concept (what it looks like). As such, the intervention also emerged as a tool to expand a vision of feedback and its many forms. The intervention also expanded thinking on when, where, and how to share feedback. Participants also expressed a deeper appreciation of the complexities of feedback as well as just how critical feedback is on the student experience, with comments such as “hands down the most critical issue” in education and “couldn’t think of a more important topic to focus on” in education.

Mitigation of Inconsistencies. Studies have consistently revealed significant variability in grading practices both across and within schools and programs (Feldman, 2018; Kohn, 1999). In qualitative data collected in this study, participants also frequently indicated that the intervention and resources improved their consistency in grading and, at the same time, helped to mitigate possible bias, both explicit and implicit. For example, comments indicated that the intervention was helpful in terms of “raising the awareness of our own bias in feedback” and also that “I believe the checklists help guide us toward a more objective view.” One participant indicated that the intervention and associated resources prompted reflective questioning such as “Am I consistent?” Another participant

shared that the intervention served as a “built-in check” that prompt reflections such as “Am I saying/doing the right thing with all students? etc.”

Opportunity for More Personalized Feedback. Data also suggested that use of the feedback bank translated into instructors feeling more able to provide more personalized feedback to students. Relatedly, instructors indicated that the bank (and linked resources) strengthened the overall quality and depth of their feedback. Examples include comments expressing appreciation for shared links and resources as well as responses that highlighted in comments on areas of self-identified areas of relative weakness for individual participants. Sample comments included, “lets me demonstrate a higher level of instructional presence within feedback,” “Allows the instructor to provide meaningful feedback to students on their success and areas of improvement in a timely manner.” Other examples include: “I can copy and personalize the feedback responses as needed” and “The bank provides a wide variety of appropriate comments for the given situations as well as provides a model for more individualized comments.”

Several comments indicated that participants found the intervention a useful base and a tool that they could further customize for their own unique course and students needs going forward. For example, one participant shared: “The chrome extension helped me give very detailed, student specific comments as I read, in line. Especially helpful for APA and grammar type comments.” Other comments provided “It is quite comprehensive and it can be personalized” and “We can be detailed in some of the guidance to help them in corrections.”

Efficiencies and Utility. Participant comments overwhelmingly indicated that the intervention led to greater efficiencies in grading. Example comments indicated that the intervention was “such a time saver” and “Good for those errors that occur on a regular basis and allows more time other feedback.” Another participant shared that the intervention “allow more time for me to engage with my students in discussion boards and virtual meetings (group and individual)” while another wrote “like the linked resources included with the pre-built comments.” Related comments shared “Students miss the same issues term over term so there is value in having a feedback bank” and “I have found extreme value in the online bank because there are links to external resources I can provide my students now. I will continue to utilize it” and “I am certain that it helps as a model and as an accelerator.” Relatedly, as comments expressed appreciation for the intervention as a time saving tool, the researcher became much more mindful of the importance of usability as new features were added and the intervention was improved. User feedback accelerated and improved the development of the intervention. Moreover, it was of the utmost importance that the intervention be easy to use so as not to overwhelm or contribute to the already significant demands on instructor time. The intervention also contributed to the growth of instructor-developed resources. Several instructors shared that they used the intervention and its resources to improve their own existing feedback banks. For example, one participant wrote: “When I have “time” I want to go back over the newly created personal banks and see where I can improve them—using the online banks as a resource. (Ditto for all my existing banks as well!)”.

Desire and Appreciation for Additional Support. Participants repeatedly expressed both a desire and an appreciation for the additional support provided via the study's intervention. Comments such as "great support" and "I like it!" "the content is great!" "I get it and I like it," and "Awesome tool, I will definitely use it!" are suggestive of value in both emotional and technical contexts. For example, multiple comments highlighted appreciation for specific resources, links, and technical features of the comment bank. Other comments expressed appreciation for instructional and pedagogical support (e.g., instructors are content experts, and often "not an expert on grammar" or "unfamiliar with APA") and understanding (e.g., "good to see what others do"). This is especially important in light of repeated comments that raised concerns associated with student challenges with writing, grammar, and formatting. Comments reiterate that faculty needed and welcomed support tools and resources. If we think of tools as the nourishment that, like with plants and seeds, the intervention helps sustain instructor growth and thrive. One participant wrote that "[s]o many of the students, 20-25%, struggle with basic writing skills, time management, and reading comprehension (or just don't read anything)," while another shared: "instructors know their content, but they desperately need support to combat burnout, fatigue, and exhaustion associated with feedback—the bank is a super resource for that." Related comments shared that: "The amount of time needed to give quality feedback is the hardest part of teaching. Anything can do to help instructors with time to combat burnout is incredibly important."

Participants feedback and requests evolved and flowed with the curve of the semester. For example, as the end of term neared and final papers began to loom, one participant sought comments on citation generating and paper formatting tools. Another

was looking for end of term motivation and, in response, the researcher incorporated a new category of comments for end of term feedback. Findings also suggest that instructors would benefit from similar supports, and just-in-time supports in particular, that extend across disciplines and courses in areas such as grammar, writing, formatting. These findings suggest that there is an enormous opportunity in terms of exploring new ways, tools, and strategies to support instructors in this context. These findings also reiterate many of the challenges noted in earlier research including, for example, with respect to student use and view of feedback as well as writing struggles.

Many comments highlighted appreciation for comments that addressed a commonly shared challenge regarding supporting students with writing and formatting growth. The bank, its resources, and its comments on fundamentals such as writing and formatting were noted in positive ways upwards of 20 times. These findings are suggestive of potential value in a cross-discipline comment bank that can be used to support fundamental student skills such as spelling, grammar, and formatting and, thereby, provide instructors, who are often content experts rather than trained writing coaches, more time to focus on course-specific content.

Desire for Collaboration and Expanded Student-Teacher-Feedback Relationships. Instructor comments also emphasized a desire for a more non uni-directional nature of feedback. Multiple comments express appreciation for the intervention as a tool of value beyond any one individual faculty and as a shareable instructor and student resource. Example comments include: “I am a student and,” “share with,” “I’m sharing this resource,” and “the feedback bank will be a great resource for both me and my students.” Many comments reiterated concerns and a desire for

additional ways to encourage student collaboration in the feedback process and as well as student views of feedback as a dialogue. Example comments included: “biggest frustration is the lack of students you actually read the feedback. They are more concerned on their grade,” “My greatest concern is all that we put into feedback, and often our students do not read the feedback,” and “I do not feel like most of my students read it.”

Research also suggests that quality feedback should be bi-directional and dialogue based (Delva et al., 2013; Laurillard, 2002; Merry & Yorke, 2013; Nicol & Macfarlane-Dick, 2006). Study findings revealed similar themes from the perspective of instructors. This is encouraging and an important reminder that it is short-sighted to focus on feedback from the perspective of faculty alone. Rather, students are inextricably interconnected and intertwined in the complex puzzle that is grading feedback and its impact on the learning process. Students should be a part of this dialogue and will be going forward. This theme also offers important lessons and avenues for future research involving the intervention and student populations.

Participants comments made clear the importance of involving students, and findings effective ways to bring students into, the feedback dialogue (interpreted broadly from use, access, and understanding, to application). Multiple comments highlighted and made visible the notion that feedback and ways to improve feedback experiences should not be approached from the perspective of faculty alone. More work must be done in order to better understand the specific types of tools and resources students would use and need so that instructor provided feedback is both reviewed and used in positive and productive ways. Moreover, informal interviews yielded insights regarding student

feedback experiences, as well. One instructor had received an email from a student that expressed thanks for the extensive feedback and resource links to aid in future assignments. The email shared:

Thank you for the extensive feedback and links to aid in future assignments. [and] Truly helpful. It has been quite along time since I've had a teacher be so thorough and actually really give me feedback. It means more than you know. Thank you for being a caring and attentive teacher. It is so important to me as this is how I believe a student truly learns and is able to go down a path of success.

Another instructor used the feedback bank to create an introductory video for students, with the goal of providing proactive feedback regarding expectations. Participants, in this way, demonstrated how the resource might also impact the feedback process beyond the gradebook. For example, several participants used the sample comments as one to many feedback and proactive feedback (i.e., announcements and emailed videos), thereby expanding thinking of when, where, and how feedback might be best delivered. In this way, the intervention served as a tool that not only inspired collaboration and helped expand a vision of feedback and its many forms but also expanded thinking on when, where, and how to share feedback.

Participants comments and applications also highlighted multiple and varied uses of the feedback bank. The open access nature spawned ideas such as pre-course videos, course overviews regarding expectations (one participant developed videos using the resources in the bank) and different ways of thinking about feedback as a concept (what it looks like). Comments also highlighted the power of collaboration on the part of instructors and the validation that emerges from such collaboration. The study

intervention was dynamic and constantly being updated in response to participant feedback. Participant comments highlighted the value in iterative, flexible tools and strategies for instructor empowerment. For example, “I like how more has been added to it—I’ve found myself using it often.” And “I liked your idea of adding humor.”

Dana and Yendol-Hoppey (2020) discussed the potential for instructor collaboration to magnify outcomes, especially “when a group of teachers work together toward a common goal” (p. 83). This study’s intervention both supported and encouraged ongoing collaboration and the associated findings suggest that the experience was validating and rewarding. Comments associated with feeling of instructors feeling heard led to positive feelings associated with needs being validated, and associated value that desires from community building. Participants repeatedly expressed gratitude and thanks for responding to their suggestions and developing associated comments. The tool was dynamic, iterative, and responsive to faculty needs. Responsiveness, in turn, was interconnected with positive feelings.

The collaboration process also reiterated and engendered some of the persistent challenges associated with grading. For example, when a participant submitted a request for a category of kudos comments, the primary researcher, worked to draft comments experienced some of the challenges of generating varied comments. Collaboration and discussions also led to course improvement feedback (separate from student feedback) that were submitted via formal course design channels. In particular, review of the bank prompted collaboration and reflection on how courses might be improved. The intervention prompted reflections on the challenges of feedback (and areas where

repeated feedback is needed, for example) led to reflections on course design and course improvement suggestions.

Desire for Ongoing Professional Development and Learning. Findings also suggested wide-spread desire on the part of instructors for ongoing professional development as well as new ways of approaching feedback and associated ongoing learning, exposure to new tools and strategies, and training. Participants consistently expressed appreciation for ongoing learning sharing, for example, “guidance in developing balance and fair feedback will be greatly appreciated.” Comments also consistently expressed interest in newly introduced strategies and tools that can improve the practice of both teaching and learning for both instructors and students and well as an eagerness to share strategies and the intervention with other faculty, both within our institution and beyond. Comments such as “when do you plan to share with faculty? I know it would be a great resource when you are ready” and “this resource should be in every instructors’ toolkit” highlight an eagerness to share with other faculty, as well. Findings also suggested that faculty were eager and interested in exploring news ways of approaching feedback, for the benefit of both instructors and students as well as sharing the intervention with others. Comments such as “I would like to see us try some different aspects to see if it could be easier for us” and “I would like to see feedback come in several different ways, such as, check boxes, just to see if the student would read our comments.” The following figures present additional quantitative data collected through observations such as daily access of the website (see Figure 4.24).

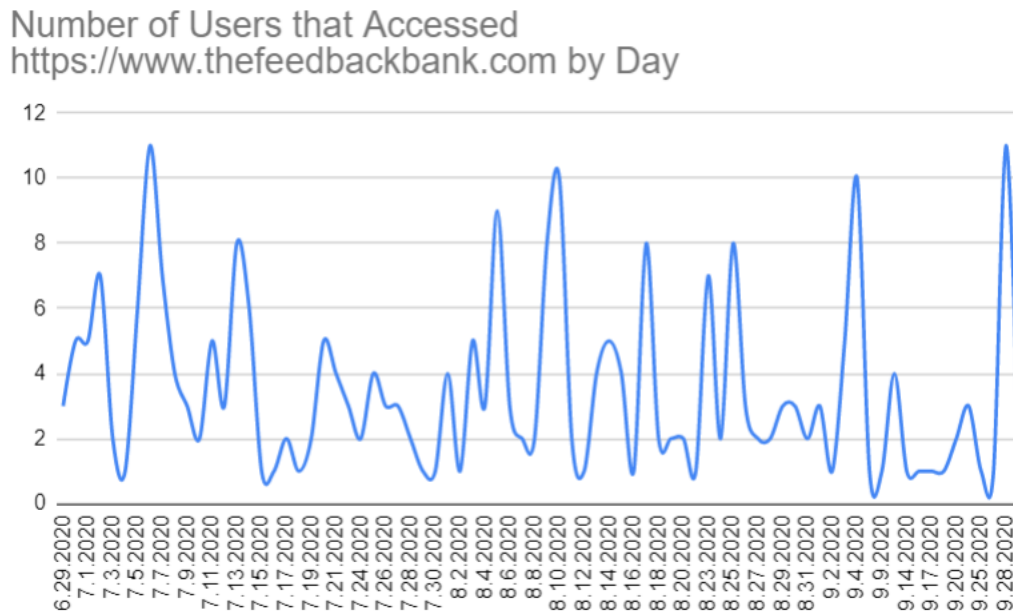


Figure 4.24 *Feedback Bank Website Daily Access/Use*

Usage was consistent throughout the duration of the study. Note that several users kept the bank open and, as a result, did not appear as additional uses, so the statistics might undercount overall usage. An original Chrome Extension was created during the course of the study and added as a feature to the intervention. Figure 4.25 presents usage rates and downloads from the date the Chrome extension was first shared. The y-axis shows how many times a day the Chrome extension was used to search for a comment in the web-based comment bank. Color coding is used to highlight how a particular user interacted with the Chrome extension and the web-based comment bank. Interestingly, access ebbed and flowed with weekly grading submission due dates (the site university operates on a 7-day window for grading with most grades due on Sundays of each week).

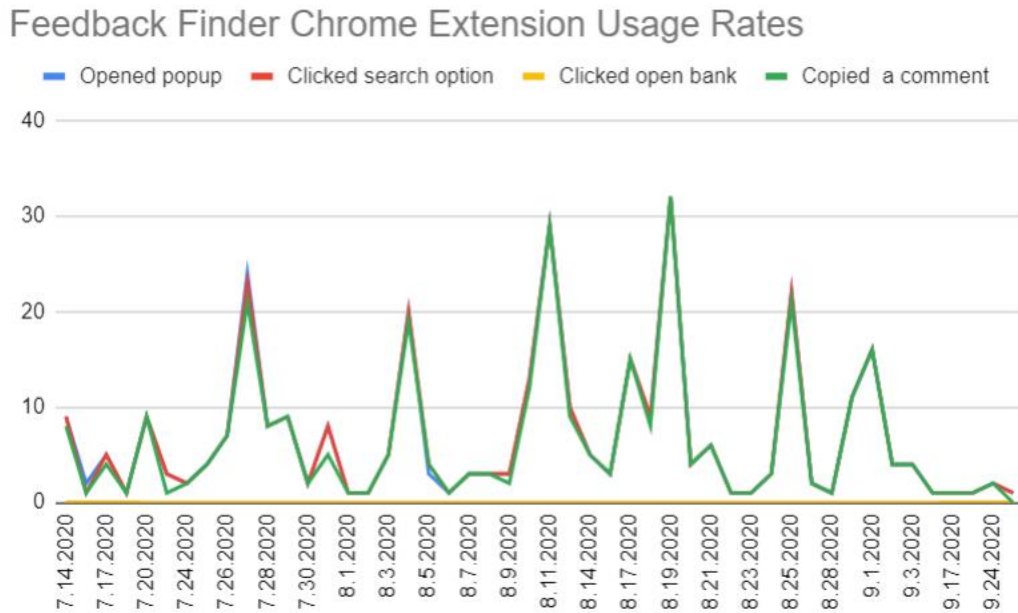


Figure 4.25 *Feedback Finder Chrome Extension Usage Rates*

Additionally, participants indicated a wide range of preferences for intervention features. The range of interests is suggestive of needs that vary by user and course. Figure 4.26 presents participants' most favorited categories.

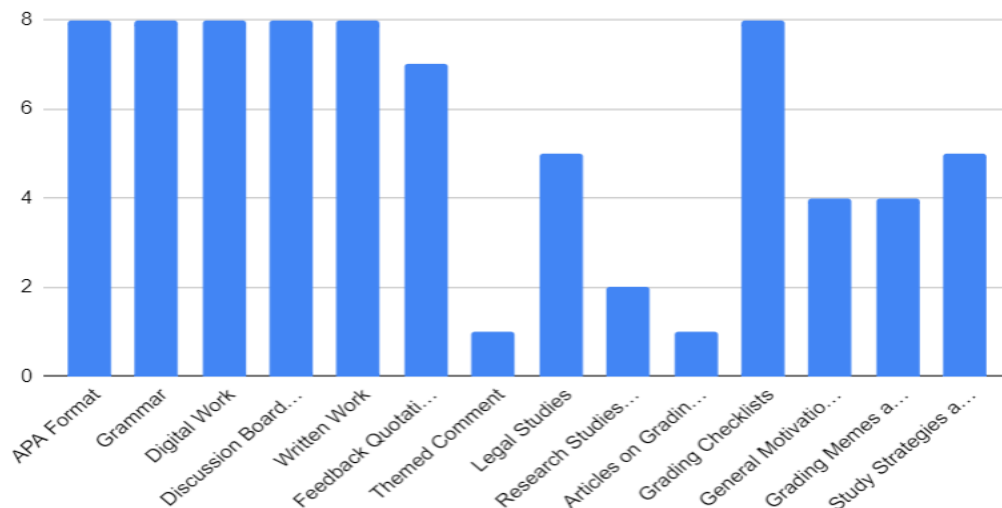


Figure 4.26 *Favored Feedback Bank Categories*

The intervention itself grew, as well, throughout the course of the study. Although metrics to calculate growth of the bank were not implemented until mid-way through the study, the following table provides daily overviews for total site content (see Figure 4.27).

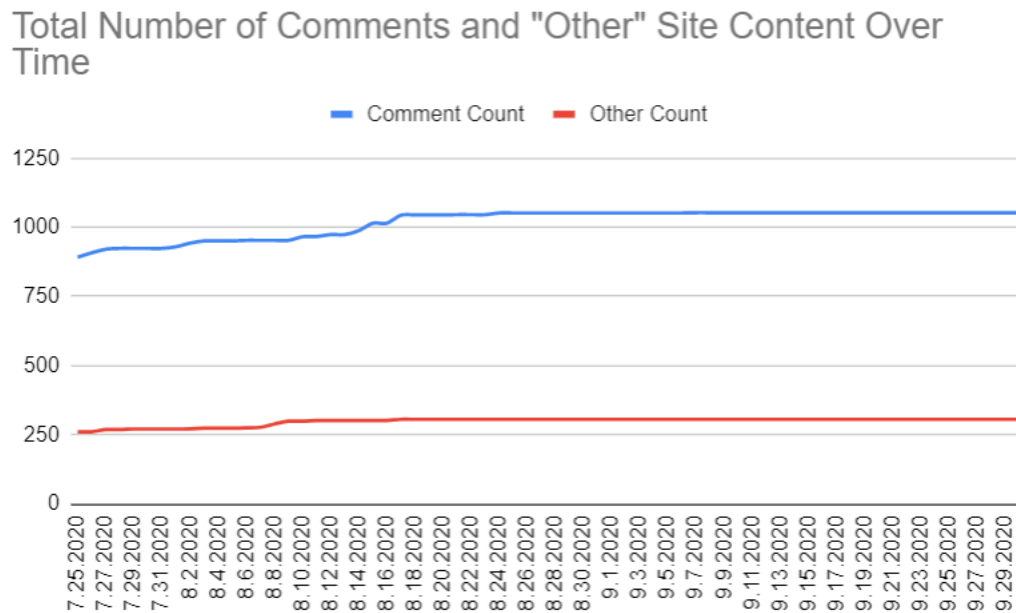


Figure 4.27 *Growth and Additions to Bank Throughout Study*

A discussion board narrative feedback and case brief narrative feedback were developed and incorporated into the intervention towards the latter part of the study. Figure 4.28 presents associated access and usage data.

Discussion Board and Case Brief Narrative Feedback Generator Usage Rates

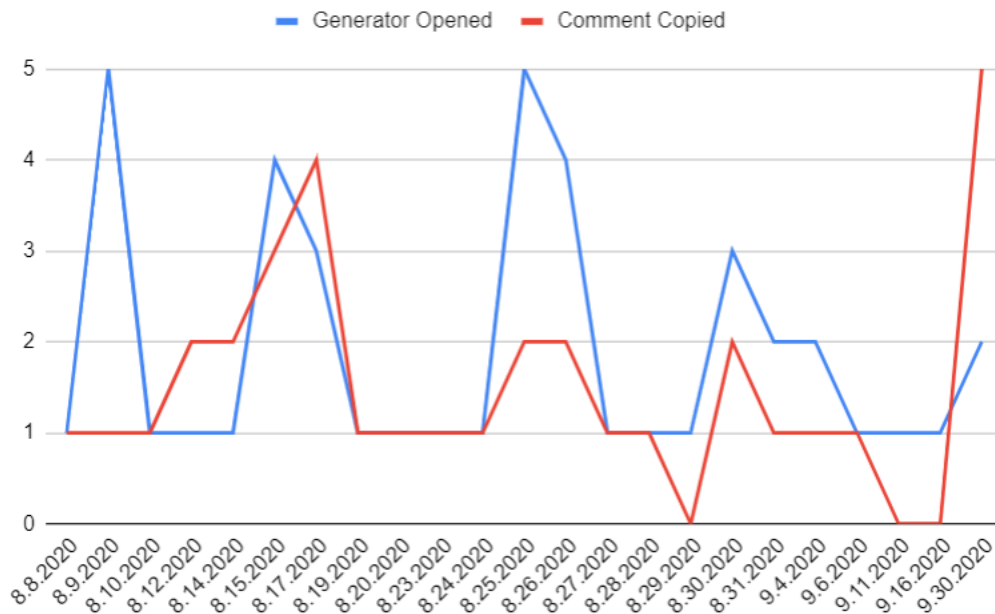


Figure 4.28 *Feedback Generator Usage Rates*

Moreover, the intervention was constantly updated in response to user input. Many of these features were introduced throughout the study, so usage and associated usefulness rates reflect only a moment in time as well as only the period of time from introduction of the feature to the end of the study. For example, the discussion board generator was only available for 6 days when the final survey was administered. Observations of usage patterns was also informative. For example, emails alerting participants of new features often triggered usage. Additionally, usage rates rose on days that grading was due (the university operates on a 7-day grading period cycle). Lessons from observations of usage patterns suggested that reminders are helpful. For example, usage often increased after emails with updates and direct links to resources were sent.

Ongoing communication likely also contributed to community, collaboration, and sustainability in terms of habit formation and usage.

Participant responses also confirmed the importance of ease of access and ease of use for all instructor supports. The Chrome extension developed early in the study was especially well received (and well used) largely due to its ease of use and accessibility. Likewise, formatting edits and updates to improve usability and readability (font, visibility of features, organization) were also well received.

Summary

This chapter explored the findings of this action research study and the following three Research Questions:

Research Question 1: How does the use of a web-based grading feedback comment bank impact online instructor's teaching efficacy?

Research Question 2: How does the use of a web-based grading feedback comment bank impact collective teacher efficacy within an online university?

Research Question 3: How does the use of a web-based grading feedback comment bank impact online instructors' attitudes and perceptions of the grading process?

The study adopted a mixed-methods action research design and the researcher collected data through the use of a pre- and post-intervention survey, three post-professional development webinar open-ended surveys, as well as participant observations, informal interviews, and document analysis throughout the entirety of the study. The researcher analyzed all collected quantitative data using descriptive statistics, including measures of central tendency such as mean, median, and associated standard

deviations. The researcher also applied inferential statistics to evaluate significance with respect to the intervention's impact and the meaning of all collected data. The researcher applied inductive analysis to analyze all qualitative data. Overall, the study's results demonstrated statistically significant increases in Overall Online Teaching Efficacy ($p = .03$) as well as statistically significant increases in instructor Online Grading Efficacy ($p = .027$). No change was observed in overall Collective Teacher Efficacy however, movement was observed at the individual level.

Qualitative data analysis indicated that participants found the intervention valuable and beneficial in a variety of ways and for a variety of use cases, needs, and applications. Eight major themes emerged. Major themes included more positive feelings / less negative feelings; expanded visions of feedback; opportunity for more personalized feedback; efficiencies; desire and appreciation for additional support; desire/need for expanded notions of student-teacher-feedback relationships; collaboration is validating; and desire for ongoing professional development. These themes both verified findings revealed through quantitative data analysis and aligned well with well-documented characteristics of quality feedback. For example, themes such as "more positive feelings" associated with the process of grading, opportunities for more personalization in feedback, desires for more student involvement with feedback, and noted efficiencies are positively associated with well-documented characteristics of quality feedback. Themes on instructor desire for support, collaboration, and professional development align well with well-documented literature on how best to support instructor growth and work.

The active and continuous cycle of reflection that is a critical component of the action research process required the research to engage in ongoing critical analysis of

both online instruction and associated grading processes. Collected data suggest that the availability and use of a web-based comment bank positively influences instructor attitudes and perceptions of the grading process. Moreover, collected data suggested that a web-based comment bank also positively influences online instructor self-, grading, and collective efficacy.

Conclusion

This chapter summarized and analyzed the findings of this mixed-methods action research study's data collection procedures as well as the associated answers to the study's research questions. The chapter presented a detailed summary and analysis of the data collected throughout the entirety of the study as well as an interpretative discussion and analysis of the collected data as it related to the study's research questions as well as a wrap-up regarding study findings.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

Chapter 5 presents an overview of this mixed-methods action research study, including the study's purpose, problem of practice and research questions. This mixed-methods action research study focused on the well-documented need for quality feedback in online learning contexts and the simultaneously persistent challenges associated with the online grading feedback process. In particular, the problem of practice examined in this action research study involved the complexity and challenges online instructors often encounter when seeking to provide quality grading feedback in online learning environments. Research suggests that while quality feedback is timely, personalized, student-specific, and dialogue-based in nature, the reality of achieving their qualities in student feedback is often daunting. More, these challenges are compounded by issues of growing class sizes, student challenges with fundamental skills such as writing and grammar, and increasingly reliance on contingent faculty in education. Evans (2001), citing Farber (1991), described burnout as "the culmination of a progressive disillusionment and lack of efficacy in which early enthusiasm and dedication ultimately yield to depletion and a loss of caring" (p. 95). Not only have instructors and students alike expressed persistent challenge, disillusionment, energy depletion, and fatigue all of which impacted self-efficacy and confidence in their abilities to achieve instructional and

learning goals, the researcher has experienced similar frustrations in both teaching and learning experiences, as well. Relatedly, Tschannen-Moran and Chen (2014) wrote that “[w]ithout strong efficacy beliefs, people do not expend effort in endeavors, as they may perceive their efforts will be futile” (p. 261). Given the powerful implications of efficacy, both when present and when not, this study sought to better understand the impact of a web-based comment bank on instructor online teacher efficacy (individual and collective) and instructor attitudes and perceptions of the online grading feedback process.

Research Questions

This study sought to better understand the study’s identified problem of practice and how to improve online instructor efficacy as well as attitudes and perceptions associated with the grading feedback process. As such, this action research mixed-methods study explored the following research questions:

Research Question 1: How does the use of a web-based grading feedback comment bank impact online instructor’s teaching efficacy?

Research Question 2: How does the use of a web-based grading feedback comment bank impact collective teacher efficacy within an online university?

Research Question 3: How does the use of a web-based grading feedback comment bank impact online instructors’ attitudes and perceptions of the grading process?

Purpose of Study

Many believe that feedback, when done right, can transform a learner for the better. Hattie (2012b), for example, has focused on feedback as one of the single most critical and most powerful influences on the degree to which an individual learns.

However, the associated grading feedback process is fraught with not only powerful potential but also potent challenges, for both instructors and students. The researcher worked with online teaching (primarily adjunct) faculty who often shared their frustrations with unexpected time demands associated with large-classes and their limited ability, due to a variety of factors including limited time and increasing class sizes, to provide individualized, actionable, and student-specific feedback on all written work. At the same time, the researcher was often asked to review student complaints associated with a perceived lack of timely and detailed feedback. Given the importance of feedback on both how and how well people learn, the researcher chose to develop a web-accessible resource that included a library of sample grading feedback comments, initiate and invite collaboration and discussion of grading feedback comments, and consolidate resources that illustrate best practices in connection with grading feedback. The specific purpose of this mixed-methods action research study was to better understand how use of the above-described web-based collaborative feedback comment bank combined with a curated collection of associated virtual professional development exercises might be used to support online instructor individual and collective teaching efficacy as well as attitudes and perceptions associated with the online grading feedback process for online instructors.

Overview/Summary of the Study

Evans (2001) reminded readers that “despair is often the root of innovation” (p. 59) and this study’s findings are suggestive of innovation emerging from an origin of challenge, if not despair, centered on challenges with grading feedback processes. Study findings were positive, promising, and encouraging. Quantitative data analysis revealed

an overall ESEOT that increased across all four subscales and at the Overall Online Teaching Efficacy level. Although statistically significant changes were not observed at the subscale levels, when evaluating for statistical significance across all thirty-two questions making up the Overall Teacher Sense of Efficacy for Online Teaching a statistically significant increase was observed. Further, when modeling data at a sample size triple the researcher's current paired population of 12 participants, statistically significant results were also confirmed. As the overall online teaching efficacy score increased in a statistically significant manner, the potential for the intervention to impact efficacy in a positive manner across all four subscales is promising. In sum, availability and use of the feedback bank intervention led to statistically significant improvements in both Educator Sense of Efficacy for Online Teaching as well as Online Grading Efficacy. While movement was observed in individual Collective Teacher Efficacy scores, the overall changes were not statistically significant. Participant feedback was consistent and ongoing throughout the course of the study. Importantly, given the study's sample size of 12 pre- and post- intervention survey respondents, generalizations are not possible. Rather, these findings are exploratory and can be used to help frame future research. Qualitative data analysis revealed a number of emerging themes, all of which validated and confirmed quantitative findings. Themes included more positive feelings associated with the grading feedback process, expanded visions of feedback; mitigation of inconsistencies; opportunity for more personalized feedback; efficiencies; desire and appreciation for additional support; desire/need for expanded notions of student-teacher-feedback relationships and collaboration is validating; and instructor desire for ongoing professional development.

Study findings revealed a number of important implications including for the quality and nature of feedback, with participants indicating more intentionality and associated efficacy to align their personal feedback with characteristics of quality feedback as a result of access to the study intervention. Findings also suggested that the study intervention has the potential to positively impact both visions of feedback, with value inherent to opportunities to see how other faculty approach feedback and to learn from such practices, as well as attitudes with respect to feedback, with participants consistently indicating that availability of the study intervention made them think of the online grading feedback process as both less exhausting and more enjoyable. Qualitatively, the study's results revealed emerging themes that further validated findings of existing research, including persistent challenges involving student writing and grammar levels as well as associated challenges associated with successfully encouraging students to read provided feedback. Participants consistently expressed value in the feedback bank when providing feedback on commonly covered topics such as grammar, format, and spelling, for example. Participants also indicated that access to the bank increased available time for personalization and individualized instruction.

Participants also emphasized that the intervention was easy to use and as well as that the intervention became easier to use with each update and technical improvement. These comments were important and emphasized the need for all future interventions and supports designed for this purpose to also be easy to use. Findings also confirmed existing research on the challenges, stresses, and fatigue associated with grading feedback on the part of instructors and suggested that the study intervention, a web-based, feedback comment bank, can positively impact instructor perceptions, attitudes,

and efficacy associated with online grading. Findings also suggested value in readily available and collaborative professional development opportunities. Throughout the study, informal conversations and on-demand webinars (each of the study's webinars were uploaded and hosted on the web-based comment bank for ongoing access) replicated a coaching model with the focus being grading feedback. Participants consistently expressed appreciation for the responsiveness of the intervention to their specific suggestions and requests.

Of course, there is no one size fits all approach to any aspect of education and grading feedback is no exception. For example, rarely did survey requests for new categories and types of comments overlap. Individual instructors have unique personal styles and practices that can be supported with openly available resources but even better supported with resources that respond to unique styles and practices. Further, there will, of course, be some resistance, as well. Evans (2001) wrote that “[r]esistance may be the normal, necessary human reaction to most change” and, at the same time, many improvement schemes “pay little attention to the lived realities of the educators who must accomplish change or to the practice problems of institutional innovation” (p. 91). Given both the natural reluctance to change as well as the associated importance of focusing on the experiences of those being asked to implement change, it is important that the researcher, in future work in this area, look back into the school community and profile faculty that might be reluctant to change (both as a process and in connection with the specific nature of the proposed intervention).

It is also important to note that the goal of offering the intervention and associated support was not to depersonalize the feedback experience, but rather the opposite. The

resource was intended to improve the feedback process and make it easier for faculty to provide more personalized feedback and instruction. In particular, the resource was designed to equip faculty to provide more detailed and personalized instruction in a more efficient and effective manner. Evans (2001) wrote that “[o]ne cannot hope to implement change without persuading people that it is necessary” (p. 55). Doing so often involves “challenging people’s view of themselves, their performance, and their clients” as the concept of “unfreezing” acknowledges the “tendency of people and systems to maintain a homeostasis” (Evans, 2001, p. 56). As the researcher hopes to introduce a new system of shared and collaborative grading feedback comments, the reality is that similar reactions may present in future applications. In order to help a team of instructors become more comfortable trying something new, one strategy involves working to mobilize “another kind of anxiety, the fear of *not* trying” (Evans, 2001, p. 56). In order to be mindful and respectful of this possibility, the researcher will always make sure to consistently and continuously demonstrate care, support, and “a commitment to working with” instructors to improve the feedback grading process (Evans, 2001, p. 58).

Moreover, as Tschannen-Moran and Chen (2014) noted, “[f]ollow-up coaching has been found to be a potent factor in supporting teachers’ self-efficacy as reforms are introduced” (p. 251). Thus, the combination of the web-based comment bank and the associated professional development webinars and informal conversations focused on the study’s problem of practice were all potentially potent factors in the study findings and will influence future work in this area. Finally, it is important to build “a critical mass of committed supporters” or “the right number of the right people” (Evans, 2001, p. 69). In connection with the study intervention and proposed vision and change, the researcher

does not expect all instructors and all students to immediately begin using and contributing to the feedback bank. However, the researcher will continue work to “identify ideal members of a critical mass” (Evans, 2001, p. 70) In this context, this might be a combination of new instructors who are actively seeking resources for grading, veteran instructors who have been assigned a new course to teach, and instructors who have consistently expressed an interest in collaborative projects and experimenting with new instructional strategies. Ultimately, with the help of this critical mass, the researcher hopes to expand “consensus throughout the school community” (Evans, 2001, p. 70).

Action Research and Curricular Improvements

The researcher has served in a variety of roles in higher education and online learning environments more generally. Throughout the duration of this study, the researcher served as an online adjunct faculty member, online faculty lead, peer coach and mentor, curriculum developer, and instructional designer in higher education online learning contexts. More recently the researcher became a full-time faculty member and internship and program coordinator at a public community college that also employs part-time teaching faculty, often for online courses. The researcher collaborates closely with her fellow instructors and continues to witness firsthand the many challenges associated with the online grading feedback process. Faculty continue to express challenges as they strive to provide quality feedback to students while simultaneously juggling challenges of increasing class sizes, students with varied needs and backgrounds, and competing pressures of the multifaceted components of academics and other full-time employment.

In her new role, the researcher plans to collaborate with colleagues and students to further impact, in positive and equitable ways, the grading feedback process and experience. The researcher hopes, as well, to continue to develop tools to support both educators and students in a variety of higher education and online learning contexts. Tschannen-Moran and Chen (2014) emphasized the “complex interplay between teachers’ self-efficacy beliefs and their knowledge and skills to implement new instructional strategies” (p. 250) as well as the varying impact of professional development opportunities on teachers with higher and lower levels of self-efficacy and collective efficacy beliefs respectively. Tschannen-Moran and Chen (2014) also highlighted the importance of tending to “the powerful role of teachers’ self-efficacy and collective efficacy beliefs” when structuring professional development opportunities. In future work, the researcher will take care to take into account teacher motivations for professional development in any new settings and will tailor the intervention to better suit each newly engaged instructor and student populations.

Senge (2012) described the discipline of shared vision as “the set of tools and techniques for bringing...disparate goals and statements into alignment” (p. 86). In building her shared vision, this researcher “will lead (or take part in) a group effort to develop images” of a desired, collective future (Senge, 2012, p. 86). Senge (2012) wrote that “[c]hanging the way we interact means redesigning not just the formal structures of the organization but the hard-to-see patterns of relationships among people and other aspects of the system, including the systems of knowledge” (p. 26). The researcher hopes to change how instructors and students think about the grading feedback process by, in part, changing the way they interact with the process itself. In particular, the researcher

hopes to further the work done in this study, and the lessons learned, and continue exploring ways to make both instructors and students become (and feel as if they are) more engaged, active, co-creators and participants in the process, rather than one being a developer/deliverer and the other being a passive recipient.

To achieve this goal, the researcher will continue to develop interventions and resources that support, in collective and collaborative ways, the grading process for both instructors and students in online programs. Senge (2012) wrote that “[a] vision is not really shared unless it has staying power and an evolving life form that lasts for years, propelling people through a continuous cycle of action, learning, and reflection” (p. 87). This reminder is why the researcher plans to continue to develop and support the web-accessible feedback bank going forward. It is the researcher’s hope that the collaborative, open, and easily accessible nature of the feedback bank resource support “staying power” and “an evolving life form” that persists and encourages “a continuous cycle of action, learning, and reflection” (Senge, 2012, p. 87).

Senge (2012) wrote that the process of “[s]hared vision strategies should be developmental” and “all stages of the process should help build the leadership capacity of everyone in the system” (p. 88). The researcher will remain mindful of the term “everyone” in this context and will work diligently to optimize the impact of the intervention and associated vision for all stakeholders (i.e., students, instructors, administration, and extended communities). Evans (2001) wrote that “[v]alues develop as problems are solved” and come to be seen as the way things are done in a particular context (p. 42). As the intervention is continuously developed and shared, instructors and students may begin to see the resource as part of how things are done. The researcher also

plans to further engage with participants and faculty who express hesitations to adopt or use the study intervention. For example, in this study, despite earlier positive feedback on the intervention, one closing comment expressed hesitation regarding future use, citing a desire for personalized feedback. This response is also suggestive of persistent tensions between administration and demands on faculty, especially adjunct faculty. It will be especially important to offer trainings and demonstrations as to how the intervention can actually support more personalized, rather than less personalized feedback for students.

The researcher plans, as well, to intentionally work to lead with inquiry and use a variety of Senge's (2012) suggested reflection questions in order to "move into deeper conversations and dialogue" (p. 109) surrounding the grading process. It is the researchers hope that the feedback bank "becomes an artifact through which" instructors and students "can examine [their] own thinking as if [they] were looking at the thinking of someone else" and that the breadth and depth of feedback comments increases (a) efficacy, awareness, and understanding of possible feedback and associated pedagogy for instructors and (b) efficacy, motivation, understanding of associated content for students (Senge, 2012, p. 111). Senge (2012) described team learning as "a discipline of practices designed, over time, to get the people on a team thinking and acting together" (p. 115). The researcher will work to foster "a series of dialogues" so that instructors can "talk safely about controversial issues," including grading feedback and the grading process (Senge, 2012, p. 117). Importantly, the goal is alignment, which is "distinct from agreement" (Senge, 2012, p. 116). In an educational institution, "alignment start with the ability to see and respect each other and to establish some common mental models about reality" (Senge, 2012, p. 116). The goal and aim of the feedback comment bank site and

resource are, similarly, alignment. That is, the researcher's vision is one where administration, faculty, and students view the grading feedback process as a collaborative, forward-focused, growth opportunity and it is the researcher's hope that access to (and availability of) a grading feedback comment bank supports a learning environment where all participants "establish some common mental models about" the grading feedback process (Senge, 2012, p. 116).

Results Related to Existing Literature

Findings confirmed and reiterated challenges, such as stress, fatigue, and burn-out on the part of faculty, that are well documented in existing literature (Nilson, 2015; Staats, Capatosto, Tenney, & Mamo, 2017; Tierney, 2013). Findings also reiterated studies that suggest professional development, collaboration, and support can help faculty. For example, Tschannen-Moran and Chen (2014) noted that "researchers could explore the ways in which technology can be used to bolster the collective efficacy of a team, department, or school to realize a future of its choosing" (p. 269). This study sought to do just that, and with promising results. Hargreaves and Fullan (2012) have also found that educators draw "confidence, learning, and feedback from having the right kind of people and the right kinds of interactions and relationships around them" (p. 4). In this study, energy was built and sustained through ongoing interactions, positive relationships, and learning and inquiry surrounding the feedback process.

Moreover, emerging themes included an expanded vision of feedback—both in form and substance. Joseph, Mikel, and Windschitl (2011) described vision as "what propels successful curricular change and separates schools with transformative curriculum from schools with status-quo cultures" (p. 73). This study's findings, and the

associated expanded visions of feedback, point to the potential to transform the feedback process for both instructors and students. As noted, the literature has explored the potential value in tools to support instructor efficacy. Findings in this study were consistent with prior research and highlight the potential for web-based tools, both general as well as context-specific tools, to support instructor efficacy and work in the feedback process more generally.

Qualitatively, emerging themes such as more positive feelings associated with the grading feedback process, expanded visions of feedback; opportunity for more personalized feedback; efficiencies; desire and appreciation for additional support; desire/need for expanded notions of student-teacher-feedback relationships; collaboration is validating; and instructor desire for ongoing professional development are both reflective of, and consistent with, literature on both feedback, efficacy, and positive aspects of professional development experiences for instructors. In addition, findings also illustrated the iterative learning potential associated with collaboration and the design process (Sarder, 2015). For example, participant input inspired the idea for the discussion board generator. A few weeks after that was developed and used, that feature (the discussion board generator) inspired the case brief generator idea. The study also found that the intervention has potential to positively influence instructor attitudes and perceptions of the grading feedback process in a variety of powerful ways.

Findings also provided valuable learning on the importance of design. The researcher learned that usability and user experience mattered just as much, if not more so, as content. Whereas the researcher initially expected intervention updates to be primarily the addition of additional feedback comments by category, many of the updates

responded to participant input and focused on site design, user experience, and feature implementation. For example, website design, font size, color contrast, and search functionality were all important. Ease of access was a commonly requested feature and ultimately led to the development of a Chrome extension that enabled, once downloaded, a user to click on the extension and search for comments and/or obtain direct access to the bank. Participants noticed, as well. Several commented that they especially enjoyed seeing the growth in the tool and the improvements (e.g., “from spreadsheet to dynamic webpage with tools”).

Implementing features that supported instructor ease of use and workflow integration was critical. The researcher developed a deeper appreciation for the value of tutorials when sharing a new tool. Evans (2001) wrote that change and reform “always causes uncertainty and confusion, especially during the early stages of implementation” (p. 66). To support instructors during this period of confusion the researcher made sure to clarify “roles and responsibilities as well as procedures” (Evan, 2001, p. 67). For example, the researcher shared clear guidelines for use of the bank and its varied features. Evans (2001) also wrote that “[c]losely related to the building of new commitment is the building of new competence” (p. 63). Further, change “revalues current skills, even if they have been applied artfully” in the past (Evans, 2001, p. 63). In this study, it was only after newly defined proficiencies associated with use of the intervention were established that the researcher and participants could collectively and collaboratively focus on higher level issues, such as the quality of grading feedback (Evans, 2001). The ongoing professional development webinars and informal conversations proved very useful in this regard.

Evans (2001) further shared that “all of us are resistant to change, especially when it is conceived and imposed on us by others” (p. 92). Thus, it is extremely important that the researcher present the change as a collaborative, joint venture (rather than something imposed on the faculty by someone else). The researcher will also be sure to “consider the larger patterns of people’s life and career development” and ask questions to ensure the intervention is developed collaboratively and in a manner that highlights ease of use and implementation (Evans, 2001, p. 93). The researcher will also be mindful of the importance of inspiring action and guarding against deflating already impacted energy levels (Evans, 2001). Evans (2001) reminded readers that “[w]hen we prescribe reform, we too often act as if it were the only change people were encountering” (p. 100). Quite to the contrary, though, for many people, work is considered the “one constant that *won’t* change” (Evans, 2001, p. 100). Ensuring access to the intervention is viewed as optional, easy to use, and something that makes work more, rather than less, efficient and effective are all extremely important. Ongoing and continuous offers of training and support will also be important to encourage reluctant faculty as well as administration (Evans, 2001).

For instructors resistant to change (either as a result of long-standing practices or fundamental beliefs), the researcher must remember that “the way we understand the world, our construction of meaning, is cumulative and solidifies over time” (Evans, 2001, p. 101). The researcher must clearly communicate the perceived and intended value of the intervention. Evans (2001) wrote that “[f]ew people can invest themselves in an idea, plan, or project that does not truly appeal, least of all those to whom time and energy are increasingly precious” (p. 100). The researcher will continue to be genuine and consistent in expressing gratitude to those who participate, as well. Evans (2001) reminded us that

“little things have a big impact on morale” and “[t]o sustain performance, everyone needs feedback” (p. 105). The researcher will not take participation or commitment for granted and will be intentional about ensuring the experience is rewarding for all. In summary, because “no innovation can succeed unless it attends to the realities of people and place,” the researcher will remain mindful and intentional in attending to the special characteristics and needs of reluctant faculty (Evans, 2001, p. 92). Continuously pausing and reflecting on whether the researcher’s communication reaches instructors “in a fundamental way” will be a constant presence in the researcher’s work and thinking (Evans, 2001, p. 115).

Further, research suggested that “to help teachers develop new competence, training must be coherent, personal, and continuous” (Evans, 2001, p. 63). In this study, consistent professional development webinars and weekly emails with resources and short video tutorials were used to support the development of new competence with the intervention. Comments such as “Seriously, the Feedback Bank is getting very polished. After viewing the 4 min. tutorial, I experimented and found it very easy to use with some great features” emphasized the importance of doing so.

Maslow’s hierarchy of needs is a motivational theory that presents “a five-tier model of human needs” (McLeod, 2018). The tiers present as a pyramid, with the bottom needs being the most basic (i.e., physiological and safety), moving to middle (i.e., love and belonging), and ultimately upper-tier needs (i.e., esteem and self-actualization; McLeod, 2018). Individual’s lower tier needs must first be satisfied, “before individuals can attend to needs higher up” (McLeod, 2018). Professional development throughout this study adopted a similar approach to training and support in connection with the

development of new competence. Sessions were relevant, personalized, and “tailored to the current knowledge, practice, and felt needs of” participating instructors (Evans, 2001, p. 64). For many participants, short videos that demonstrated how to both download and use a new feature was valuable and an important component of ultimately adopting the tool for use when grading. Another example involved expanded search functionality and refinement of words and language used in comments so as to optimize search hits. The researcher adopted increased intentionality when drafting comments and common search terms so that content could be more easily located.

Major Points of the Study, Revelations, and Implications

Study findings revealed a statistically significant impact on the part of the intervention on both Educator’s Sense of Efficacy in Online Teaching as well as Online Grading Efficacy. Impact on Collective Teaching Efficacy in Instructional Strategies was also observed at the individual instructor level. In addition, qualitative data analysis revealed eight emerging themes (both technical and holistic), all of which reiterated findings in the qualitative data analysis.

The resource also proved especially valuable as a support and as a tool to spark new ideas and visions of what feedback can be. Comments consistently highlighted the value of resources linked on the site. Revelations often included an expanded vision of feedback (e.g., what it looks like, options, possibilities); value in a variety of tools and content; the potential for tools to promote greater equity in scoring (e.g., comments suggested that the feedback generators prompt instructors to consider all assignment elements and also help combat fatigue and scoring inconsistencies). In addition, with the challenges of teaching and the pressures of grading (as well as the importance of

feedback) are well documented and appreciated. Instructors feel the pressures and recognize the value in such a tool. As more institutions of higher education develop online programming, instructors (and adjunct/contingent faculty in particular) will increasingly seek resources of this nature. Having a readily available bank of comments for instructors is an efficient way of supporting faculty, providing professional development through modeling, and impacting both individual and collective efficacy levels. The intervention offers support as evidenced through the study's emerging themes well beyond the researcher's own institutions and places of work.

Action Plan

Given the study's promising findings, the researcher believes next steps are warranted and, as such, an action plan has been developed. All of the recommended action steps relate to and focus on improved practice, equity, and inclusion in grading practices and related teaching and learning experiences. Figures 5.1 to 5.5 present component of the study's action plan in graphic form. Figure 5.1 provides an overview.

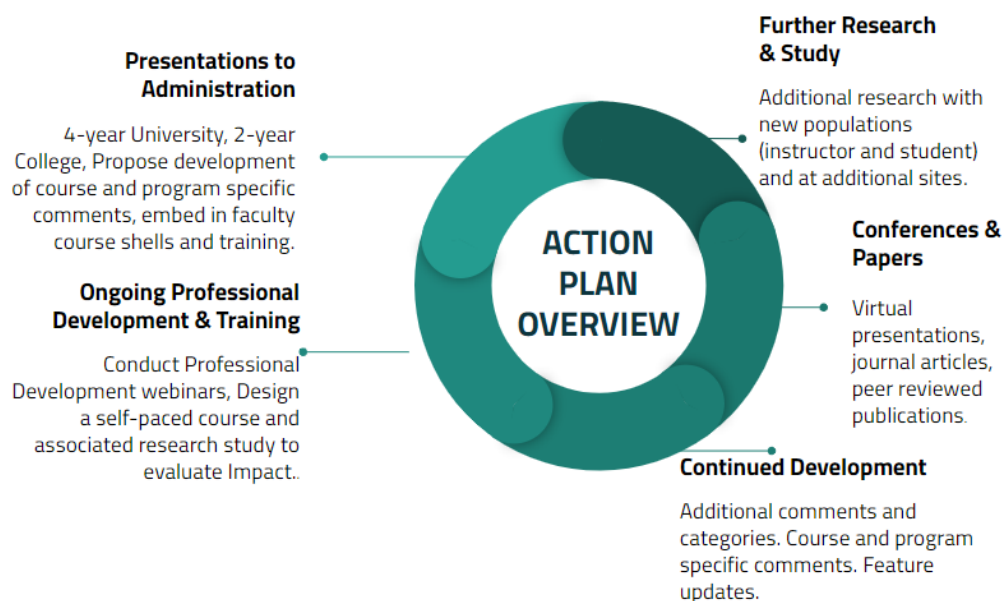


Figure 5.1 *Action Plan Overview*

In order to share the resource and study findings in a broader context, the researcher not only plans to conduct the study with a larger population but also plans to share the current study findings with her college administration as well as administrators and faculty at other universities and programs. Specifically, the researcher hopes to work with administration to demonstrate how the tool can support instructors and increase likelihood that those instructors will be able to provide robust and personalized feedback. The researcher also plans to share the intervention with colleagues, present the tool and study findings at upcoming conferences, and write about the experience in journal articles, both scholarly and practitioner-focused (see Figure 5.2).



Figure 5.2 *Presentations and Ongoing Dialogue*

To address and proactively prepare for concerns with personalization that might be raised on the part of administration, the researchers plan to develop more generator feedback with prompts to personalize, in addition to professional development workshops that demonstrate how to use the tool. Throughout the study a generator for both

discussion board narrative feedback and case brief feedback was developed. With this tool instructors choose from a variety of feedback categories (select one comment from each category) and many have blanks which serve as reminders to include student-specific examples. Pre-loaded blanks and prompts to include examples both remind and nudge instructors to engage with student work and model how one can do so. More of these generators might be developed and designed for specific assignments in specific courses and programs.

The researcher plans, as well, to continue to build the bank and share with faculty and, perhaps, develop as a bank of comments that a program administrator, department head, program dean, and other stakeholders can share with instructors. This might be the bank in its entirety or some subset unique to a program. The researcher will continue to maintain the site, add comments, new features so that instructors can upload their own comments, as well. The intervention will also be depersonalized for use by instructors at any college, with additional opportunities for instructors to customize their experience with the site (including through individual log-ins and password protected content). The researcher will develop additional discipline and course specific comments as well as features where users can upload their own comments (assignment and discipline specific) in a protected site (options to share publicly or privately; see Figure 5.3).



Figure 5.3 *Ongoing Development of Intervention*

Further, the researcher plans to conduct additional, similar studies in new contexts and with new populations, including new online instructors, new instructors, and student populations (see Figure 5.4).



Figure 5.4 *Further Research*

In her role as a full-time faculty member and program coordinator, the researcher plans to also share the study's findings with colleagues and develop the comment bank for use in specific courses and disciplines for the benefit of more faculty and students. The researcher will continue to share study findings in university professional learning contexts so that others might benefit from the intervention and also to raise awareness of varied ways to respond to the challenges associated with online grading (see Figure 5.5).



Figure 5.5 *Trainings and Collaborations*

The results of this study may also serve as a base on which future professional development experiences might be provided. The researcher plans to conduct workshops on the online grading process at her college and to continue to share and improve the study intervention at college's bi-annual professional development week and throughout the year. As a part of the study's intervention, the researcher also developed tools that can be used to mitigate challenges associated with bias in the grading feedback process. The research plans to conduct separate professional development workshops on the issue of implicit bias in grading and the potential benefits of grading checklists.

Recommendations for Policy/Practice

Based on the study's findings, there are a variety of recommendations for both policy and practice. Observed value in collaboration leads to several policy and practice recommendations. For example, the feedback bank intervention grew exponentially throughout the course of the study in ways the researcher could never have imagined at the start of the study and the development of the intervention. All updates and revisions to the bank were based on participant feedback. Examples include the addition of specific comment categories (including kudos-related feedback, outreach templates, and formatting categories) as well as specific intervention functions (including a discussion board feedback generator aligned with a department rubric, a case brief feedback generator, a meme maker, a global search, and a favorites tools). Participants were interested in what others were both doing with respect to feedback and finding helpful with respect to the feedback bank itself.

Thus, universities might more actively encourage instructors to share best practices and also intentionally create space, time, and tools that support and encourage sharing amongst instructors both within and across departments. Universities might also provide opportunities for instructors to share best practices in easy to explore ways. Participants consistently noted that they found themselves referring to the feedback bank at unexpected times (for example, when a unique student challenge arose and when grading late at night). Programs might consider developing discipline and/or course specific feedback banks, with comments designed for specific assignments and in alignment with specific assignment rubrics.

Additionally, participants expressed value in a combination of tools, including accessible professional development (recording links were valuable for on-demand viewing) and collaborative tools that were iterative and responsive to instructor needs (multiple comments expressed utility in updates to the bank based on instructor requests and input). Webinar feedback was positive and included comments such as “helpful to pause and review”). Participants also expressed appreciation for the iterations to the tool in response to user requests. For example, one participant sought kudos-related comments, while another asked for sample outreach feedback. Other requests included citation generating tools, reference manager feedback, and APA style 7th Edition comments. Curriculum developers might develop banks for instructor use. Comments might be assignment specific and chunked so as to align with individual rubric elements.

The intervention and sites like it can also be helpful as professional development for instructors. For example, the bank can serve as a tool to help focus instruction on assignment elements (which are all aligned with bank comments and associated course and program outcomes). In contexts where multiple instructors teach a model or the same course, this can help ensure more equitable feedback across sections. In sum, university support might develop professional development webinars on both grading feedback and the use of tools such as a collaborative comment bank for instructor staff. The main focus of a learning organization (schools and otherwise) is how can individuals work together in order to perform at their best (Sarder, 2015). Most of all, the researcher plans to continue to raise awareness of the importance of grading feedback and what schools and curriculum leaders – as influencers in learning organizations – can do to support both instructors and students in this context.

Recommendations for Future Research

A variety of intriguing opportunities for future research emerged. For example, a significant majority of the study's participants (all but one) were previously familiar with feedback banks. Future research might be conducted in an environment where instructors are less familiar with the concept. In particular, a similar study might be conducted with instructors who are not familiar with and/or have never used a feedback bank; with instructors who have been identified with a need to improve in connection with feedback; with new online instructors; and/or with new instructors. Similarly, the study was conducted with longtime online instructors in a university that is fully online and has been developing programs and courses for fully online delivery for quite some time. With the increasing shift to online instruction, it might be beneficial to conduct the study at a university shifting to online learning and with new to online teaching instructors.

It is also important to note that there is a possibility that instructors did not feel comfortable answering truthfully and/or may have overstated comfort levels and/or the detailed nature of current feedback for job security reasons as well as a possible lack of comparisons and applicable benchmarks. Additionally, because the site university operated under a model where course feedback is often reviewed weekly (with additional reviews permitted at any time), it is possible that this instructor population is not representative of others and that the feedback students receive at this university, along with associated feedback requirements and expectations, may significantly differ in both form and substance from that provided at other institutions. Thus, for future research the study might be conducted at a university without minimum feedback requirements and/or spontaneous review of faculty feedback.

All participating instructors had taught their assigned course(s) before. Of the 18 participants who completed the pre-intervention survey, two had taught their current course more than 20 times, four had taught their course 11-20 times, 11 had taught their current course two-10 times, and one was teaching their course once before. No participating instructors were teaching their assigned course(s) for the first time. Future research might explore the impact of the intervention and associated professional development on a cohort of instructors teaching a course for the first time.

Because all study participants had taught their current course before and also had taught online for a while, future research might involve conducting the study with new instructors and/or instructor teaching online and/or a course for first time. The participant population's holistic composition might also have influenced the study findings. As noted, participants generally were familiar with comment banks at the start of the study. Pre-intervention efficacy levels ranged from moderate-high to high. Additionally, participating faculty were all over 40 years of age, had extensive work experiences, and were not "new" to teaching, teaching online, or their current courses. The participant population was, as a general matter, very experienced both with respect to their current courses and online instruction. The intervention has the potential to be of even greater use to newer faculty and those with little/no experience online and/or teaching a course for the first time. Thus, future research might explore findings in this context.

Participants taught both graduate and undergraduate criminal justice courses, as well as a wide range of courses (including introductory courses such as research methods and writing in the criminal justice profession, intermediate level courses such as intelligence and surveillance, ethics-related criminal justice courses, as well as a program

capstone course). future research might focus on instructors teaching a particular course, with feedback comments developed for specific course-assignments and in alignment with course rubrics. Additionally, all participating instructors were also experienced in online instruction. Of the 18 participants, seven had been teaching online for more than 10 years, seven had been teaching online for more than 5 and less than or equal to 10 years, three had been teaching online for more than 1 and less than or equal to 5 years, and one had been teaching online for 1 year. Future research might also explore the impact of the intervention and associated professional development on a cohort of instructors teaching an online course for the first time.

In this study, nine participants held a doctorate degree, four held a master's degree (not education-related), and five held a master's degree (education-related). Of those with PhD's, five were in fields other than education, two held JD degrees, one held a JSD degree, and one held a DSc degree. Future research might explore impact on a participant sample with no prior education-related degrees or coursework. All participating instructors were members of a social sciences department and taught in the site university's criminal justice program, at both the graduate and undergraduate levels. Future research might explore the impact of the intervention and associated professional development on a cohort of instructors teaching in other disciplines, and perhaps at graduate and/or undergraduate levels separately. All participating instructors were over 40 years of age. Thirteen were between the ages of 41 and 60, four were older than 60, and one preferred not to say. Future research might explore impact on instructor younger than age 40, in order to better understand and evaluate any cross-generational trends and variations. Participating instructors had been assigned sections of standard department

courses to teach in a given session. Future research might explore impact on instructors in programs where courses are individually designed. Further, as a significant majority of the study's participants were previously familiar with feedback banks, future research might be conducted in an environment where instructors are less familiar and/or entirely unfamiliar with the concept.

The site university also has a highly developed set of expectations for feedback with, at the time this study was conducted, comments to students both required and expected down to the level of individual rubric elements. It would be interesting to conduct the study with faculty at a university with no such expectations or requirements. Because participants were generally long-time instructors with a passion for improvement, it would be potentially valuable to conduct the study in variety of settings and with a variety of participant populations.

Further, a significant majority of participants expressed high levels of self-efficacy with respect to both online instruction and grading feedback. Future research might focus, specifically, on instructors with previously reported challenges and lower levels of self-efficacy. Tschannen-Moran and Chen (2014) noted that teachers' levels of efficacy influence the manner and degree to which the teachers respond to professional development activities and interventions. This self-selecting, convenience sample was composed primarily of veteran online instructors with relatively high levels of self-efficacy, collective efficacy, and performance. Thus, it might be beneficial, in future work, to conduct the study with instructors who have under-performed on yearly performance evaluations and/or have been identified as desiring or needing additional support with grading.

Future research might also test the intervention with respect to a specific type of comment bank, for example a bank focused on a specific assignment only. Additionally, participant comments consistently noted challenges in connection with student review and application of feedback. Future research might share a feedback bank with students and evaluate impact on student coursework and improvement throughout a term. A related inquiry might explore end of term student satisfaction surveys across courses where a feedback bank is and is not used by either/both faculty and/or students. A study might explore student mastery and retention levels in courses with access to the bank compared to those without. Another future path includes sharing the bank with students in ways that push feedback forward, in advance of submission, as a checklist and opportunities for enhanced dialogue.

The researcher also plans to conduct the study with a larger population of respondents. The current study was conducted with a population of 12 respondents (completing both the pre- and post-intervention survey). Modeling the study findings on a sample size of 36 (compared with 12) and using the same data collected in this study, a p value of .038 was obtained. However, given the small sample size this study's findings are exploratory only, as the sample size was not large enough to support final conclusions regarding validity of results. The researcher plans to re-run the study with a larger population to further explore the impact of the intervention and to confirm such modeling. Repeating this study with a larger sample size would be insightful and potential validating.

Future research might also explore participant experiences with specific aspects of the intervention as well as preferred use cases (e.g., searching for specific types of

comments and/or using the bank as a brainstorming tool). The resource can help with faculty burn-out and time delays, as well. In order to proactively address possible tensions between administration and contingent faculty, the researcher might schedule trainings and demonstrations for administrators to show how can use the tool to support more personalization and more robust and specific feedback. Of note, in post-intervention survey responses all adjuncts indicated an intention and desire to continue to use the intervention going forward.

However, rather than assuming all potential stakeholders will see the possibility of enhanced personalization, the researcher will work closely with administrators (especially those in non-teaching roles) and decision makers to increase likelihood of tool improvements and implementation. There are also opportunities for ongoing professional development and related study. For example, intervention resources (see Appendix K) might be a part of new developed training on bias and grading mitigation tools and strategies. The intervention might also be used as a part of newly developed self-paced training tutorials on grading more generally. The researcher might also clarify the bank's personalization features and how the comments can (and should) be personalized for specific students and assignments. The researcher might also build in more opportunities for instructor personalization, including fill-in-the blank lines in prepared comments and embedded reminders or prompts to include examples from student work. Given the complex relationship between and among already complex topics such as instructor efficacy and feedback, any one or more combinations of the above variations on the research study has the potential to yield valuable insights on the study's research questions.

In addition to future research and training opportunities, there are also opportunities to further improve and refine the comment bank, both features and content. For example, the researcher might explore opportunities to provide secure access to course-specific and university-specific comments that can be personalized when used. Individual users might also be able to directly upload assignment-specific comments for later personal use (via the Chrome extension) when grading. Future work might also include user-specific log-ins and associated accounts along with more detailed statistics per user overall. Study findings reiterated the need to ensure ease of use for instructors. The Chrome extension responded to this expressed need, as did pre-recorded videos on use of the tool. Future opportunities include built-in feedback options for selection within assignment rubrics as well as built-in rubrics that are integrated with comment banks. The intervention might also be made available as a resource through university teaching and learning centers.

Results and Conclusion

This mixed-methods action research study explored how the availability of a web-based, collaborative grading feedback comment bank impacts individual instructor's online teaching efficacy, grading efficacy, and online instructors' collective teacher efficacy as well as online instructors' attitudes and perceptions of the grading process. Quantitative data was analyzed and mean scores from the pre- and post-intervention surveys were calculated and then statistically compared so as to examine if the difference between the means was statistically significant (Mertler, 2017). Results were promising, with statistically significant impact seen for both Overall Online Teaching Efficacy and Online Grading Efficacy. At the same, it is important to note that these findings are

exploratory only, as the study sample size was not large enough to support any final conclusions regarding validity of results. Qualitatively, eight emerging themes were identified. Going forward, the researcher will continue the action research cycle with new teachers, colleagues, and students in the coming months and years. The impact of this action research on the teacher-researcher will extend far beyond the duration of this 14-week mixed-methods action research study. Rather, this research study and related experience will influence all future grading in the researcher's classrooms and potentially that of her colleagues, as well.

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APPENDIX A

INVITATION TO PARTICIPATE / CALL FOR PARTICIPATION

Dear Online Educator and Colleague

My name is Jennifer Schneider and I am a doctoral student in the University of South Carolina's Ed.D. (Curriculum and Instruction) program.

I am writing with an invitation to take part in a mixed-methods action research dissertation study to learn more about the possible relationships between online instructor self and collective efficacy beliefs, attitudes and perceptions of the online grading feedback process, and use of a web-based feedback comment bank.

This study seeks participation from faculty who are teaching an online course during the Fall 2020 term and your input is both important and valued.

Realizing that your time is at a premium, and if you choose to participate, you will be eligible for a drawing for one of six \$50 Amazon gift certificates.

If you are interested in participating, please feel free to respond directly to this email. Additionally, please go ahead and complete the pre-intervention survey (linked at the end of this email) and include your name and email at the conclusion of the survey. If you are interested in the drawing or in receiving a copy of the summarized results, there is also an opportunity to submit your name and email address indicating your interest.

If you do not feel comfortable supplying your name and email in this manner but would still like to be entered in the drawing and/or in a copy of the results, you may leave these fields blank and email me directly at j.schneider@snhu.edu.

Planned Timing

At present, we are hoping to collect data over the Fall 2020 term. Thus, ideally, you'd be teaching an online course in the Fall 2020 session.

If you agree to be in this study, you will receive access to a grading feedback bank comment for use throughout the Fall 2020 term (and beyond).

Should you agree to participate, you will be asked to complete a pre- and post-intervention survey. You will also be invited to attend three online, 30-minute webinars (beginning, middle, and end of the Fall 2020 term).

The web-based surveys should take you approximately 10-15 minutes to complete. All of your replies are confidential and you may choose to exit the survey at any point.

Each webinar will explore a unique aspect of grading feedback. There will also be time to discuss use of the feedback comment bank. I will hold optional, 15 minutes virtual sessions each week of the term. These 15-minute sessions will share grading research and strategies and also provide an opportunity to discussion use of the feedback bank.

Future Opportunities

As you consider participation, I'd encourage you to think about the project from a long-term perspective and future scholarship (publishing and presenting opportunities).

In particular, at the conclusion of this research study, I plan to pursue a variety of publication and presentation opportunities to share this work and study findings/results. I would welcome publishing and presentation collaboration with any/all study participants (optional, of course).

What Would You Most Like to See?

For anyone interested in participating, please also feel free to share types and categories of feedback for which sample comments might be most useful.

At present, the feedback bank will include comments that address APA Style and Formatting, Grammar, Discussion Boards, Written Assignments, and Digital Presentations.

I'd gladly customize the bank and add categories you are most interested in exploring.

Thank You!

Thank you in advance for your assistance.

If you have any questions, concerns, or wish to report a research-related problem, please contact me at 215-264-1636 or at j.schneider@snhu.edu.

You may also contact my dissertation chair, Dr. Yasha Becton at 803-440-7469 or yyjones@mailbox.sc.edu

To begin the survey, please click on this survey link:

Please complete the following Doodle Poll to identify preferred times for the three session webinars. See:

Sincerely, Jennifer Schneider

APPENDIX B

INSTRUCTOR SURVEY GREETING

Dear Online Educator and Colleague,

My name is Jennifer Schneider and I am a doctoral student in the University of South Carolina's Ed.D. (Curriculum and Instruction) program. I also serve as a Faculty Team Lead and Adjunct Faculty for SNHU COCE. I teach in the Graduate Criminal Justice and Business Divisions.

I am writing with an invitation to take part in a mixed-methods action research dissertation study to learn more about the possible relationships between online instructor self and collective efficacy beliefs, attitudes and perceptions of the online grading feedback process, and use of a web-based feedback comment bank. This study seeks participation from faculty who are teaching an online course during the Summer and/or Fall 2020 term and your input is both important and valued.

Realizing that your time is at a premium, and if you choose to participate, you will be eligible for a drawing for one of six \$50 Amazon gift certificates.

If you are interested in participating, please go ahead and complete the informed consent documentation and the pre-intervention survey (both linked at the end of this email) and include your name and email at the conclusion of the survey. If you are interested in the drawing and/or in receiving a copy of the summarized results, there is also an opportunity to submit your name and email address indicating your interest.

If you do not feel comfortable supplying your name and email in this manner but would still like to be entered in the drawing and/or in a copy of the results, you may leave these fields blank and email me directly at j.schneider@snhu.edu.

Planned Timing

We are planning to collect data over the Summer term. Thus, ideally, you'd be teaching an online course in a Summer 2020 session.

If you agree to be in this study, you will receive access to a grading feedback bank comment for use throughout the Summer and Fall 2020 term (and beyond).

Should you agree to participate, you will be asked to complete a pre- and post-intervention survey. You will also be invited to attend three online, 30-minute webinars

(beginning, middle, and end of the Summer/Fall 2020 term). All webinars will be separately recorded and available for viewing if you are unable to attend live.

The web-based surveys should take you approximately 10-15 minutes to complete. All of your replies are confidential and you may choose to exit the survey at any point.

Each webinar will explore a unique aspect of grading feedback. There will also be time to discuss use of the feedback comment bank. I will hold optional, 15 minutes virtual sessions (“Open Sessions”) each week of the term. These 15-minute sessions will share grading research and strategies and also provide an opportunity to discuss use of the feedback bank.

Future Opportunities

As you consider participation, I’d encourage you to think about the project from a long-term perspective and future scholarship (publishing and presenting opportunities).

In particular, at the conclusion of this research study, I plan to pursue a variety of publication and presentation opportunities to share this work and study findings/results. I would welcome publishing and presentation collaboration with any/all study participants (optional, of course).

What Would You Most Like to See?

For anyone interested in participating, please also feel free to share types and categories of feedback for which sample comments might be most useful. Submit suggestions and requests at this link: <https://forms.gle/SfgTcD4mwamkpVFo9>

At present, the feedback bank will include comments that address APA Style and Formatting, Grammar, Discussion Boards, Written Assignments, and Digital Presentations.

I’d gladly customize the bank and add categories you are most interested in exploring.

Thank You!

Thank you in advance for your assistance.

If you have any questions, concerns, or wish to report a research-related problem, please contact me at 215-264-1636 or at j.schneider@snhu.edu.

You may also contact my dissertation chair, Dr. Yasha Becton at 803-440-7469 or yyjones@mailbox.sc.edu

To complete the Informed Consent documentation, please click on https://snhu.qualtrics.com/jfe/form/SV_4GXuKERpSYuxWU1

Only after completing the Informed Consent and to begin the Pre-Intervention Survey, please click on this survey link: <https://forms.gle/SfgTcD4mwamkpVFo9>

Sincerely, Jennifer Schneider

APPENDIX C

OPEN-ENDED SURVEY ADMINISTERED AT THE END OF EACH OF THREE PROFESSIONAL DEVELOPMENT WEBINARS

Questions:

1. What are your current thoughts on the online grading feedback process?
2. What do you like about the web-based feedback bank?
3. What changes would you recommend to the web-based feedback bank?

APPENDIX D

PROFESSIONAL DEVELOPMENT SESSION RESOURCES

Webinar 1

Slides:

<https://docs.google.com/presentation/d/1F5LCAy3lw8qNOhAoTpALIKn7cNs11xZfM00MFZ8Ifbs/edit?usp=sharing>

Recording: <https://youtu.be/4ibxc9b08VQ>

Resources: <https://docs.google.com/presentation/d/16XlyrzZMyWYLEdnDE1BWDa-Yp1qgxyWHGPMUgeDOrpA/edit?usp=sharing>

Webinar 2

Slides: https://docs.google.com/presentation/d/1-Zfx0oRiL1n9FmwIznuVPPOX46R2kx1DbVd6q_97Y0/edit?usp=sharing

https://docs.google.com/presentation/d/1-Zfx0oRiL1n9FmwIznuVPPOX46R2kx1DbVd6q_97Y0/edit?usp=sharing

Recording: <https://youtu.be/4ibxc9b08VQ>

Webinar 3

Slides:

https://docs.google.com/presentation/d/1pY3zkGo2j4FE_TPOzq2e_YrLkUndIZ9MCIMu_oMMcNmk/edit?usp=sharing

Recording: <https://youtu.be/epQc0MWd7yI>

APPENDIX E

MICHIGAN NURSE EDUCATORS SENSE OF EFFICACY

FOR ONLINE TEACHING SCALE

Michigan Nurse Educators Sense of Efficacy for Online Teaching Scale

Revised from: Teachers' Sense of Efficacy Teaching Scale (Tschannen-Moran and Hoy; 2001)

Directions: You are invited to participate in this study because the institution at which you are employed has you on record as teaching a theoretical course this winter/spring 2008 semester. You meet the parameters of the sample set for this study if you are indeed teaching a face-to-face and/or an online theory course. This questionnaire is designed to help us gain a better understanding of the current self-perceptions nurse educators hold regarding their abilities to successfully teach in online environments. Perceptions are sought from educators with little or no online teaching experience and educators having some or extensive online teaching experience. Please indicate your opinion about each of the statements below. Your answers are confidential.

Questions 1-32 are concerned with understanding how nurse educators judge their current capabilities for teaching online nursing lecture courses. Even if you have little or no experience with online teaching, please try to answer each question. A helpful prefix to each answer is, "I can do...."

1. How much can you do to help your students think critically in an online class?

Nothing		Very Little		Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9

2. How much can you do to get through to disengaged students in an online class? (e.g. passive learners who might lurk online, but fail to actively contribute to their own learning.)

Nothing		Very Little		Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9

3. How much can you do to control disruptive behavior (e.g. disrespectful posting or failure to adhere to outline policies for posting) in an online environment?)

Nothing		Very Little		Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9

4. How much can you do to motivate students who show low interest in online work?

Nothing		Very Little		Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9

5. To what extent can you make your expectations clear about student behavior in an online class?

Nothing		Very Little		Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9

6. How much can you do to get students to believe that they can do well in an online class?

Nothing		Very Little		Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9

7. How well can you respond to difficult questions from online students?

Nothing		Very Little		Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9

8. How well can you establish routines (e.g. facilitate or moderate student participation) in coursework to keep online activities running smoothly?

Nothing		Very Little		Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9

9. How much can you do to help online students' value learning?

Nothing		Very Little		Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9

10. How much can you gauge student comprehension of what you have taught in an online course?

Nothing		Very Little		Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9

11. How well can you craft questions or assignments that require students to think by relating ideas to previous knowledge and experience?

Nothing		Very Little		Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9

12. How much can you do to foster individual student creativity in an online course?

Nothing		Very Little		Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9

13. How much can you do to get students to follow the established rules for assignments and deadlines during an online class?

Nothing		Very Little		Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9

14. How much can you do to improve the understanding of a student who is failing in an online class?

Nothing	Very Little				Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9	

15. How much can you do to control students dominating online discussions?

Nothing	Very Little				Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9	

16. How well can you establish an online course (e.g. convey expectations; standards; course rules) with each group of students?

Nothing	Very Little				Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9	

17. How much can you do to adjust your online lessons for different learning styles?

Nothing	Very Little				Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9	

18. How much can you do to use a variety of assessment strategies for an online course?

Nothing	Very Little				Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9	

19. How well can you develop an online course that facilitates student responsibility for online learning?

Nothing	Very Little				Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9	

20. To what extent can you provide an alternative explanation or example when students in an online class seem to be confused?

Nothing	Very Little				Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9	

21. How well can you respond to defiant students in an online setting?

Nothing	Very Little				Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9	

22. How well can you structure an online course that facilitates collaborative learning?

Nothing	Very Little				Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9	

23. How well can you structure an online course that provides good learning experiences for students?

Nothing	Very Little				Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9	

24. How well can you provide appropriate challenges for very capable students in an online environment?

Nothing		Very Little		Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9

25. To what extent can you use knowledge of copyright law to provide resources for online students?

Nothing		Very Little		Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9

26. How well can you navigate the technical infrastructure at your institution to successfully create an online course?

Nothing		Very Little		Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9

27. How well can you navigate the technical infrastructure at your institution to successfully teach an established online course?

Nothing		Very Little		Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9

28. To what extent can you use asynchronous discussions to maximize interactions between students in an online course? (Asynchronous means not online at the same time)

Nothing		Very Little		Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9

29. To what extent can you use synchronous discussions (e.g. same time chat rooms) to maximize interaction between students in an online course?

Nothing		Very Little		Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9

30. How well can you use computers for word processing, internet searching and e-mail communication?

Nothing		Very Little		Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9

31. To what extent does your comfort level with computers facilitate participation in online teaching?

Nothing		Very Little		Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9

32. How well can you navigate the internet to provide links and resources to students in an online course?

Nothing		Very Little		Some		Quite a Bit		A Great Deal
1	2	3	4	5	6	7	8	9

Hang in there - you have completed over 50% of the survey! Thank you for your participation!

The next section asks for background information from participants.

All information collected is confidential.

You will be given an opportunity to provide a contact email if you wish to be included in a drawing for one of six \$50.00 Amazon gift certificates and/or you wish for a copy of the summarized results from this survey.

Background Information Section

33. What type of institution do you work for?

Community College _____

4-year College or University _____

34. Please indicate your gender:

Male _____

Female _____

35. What was your age on your last birthday? _____

36. Please identify your current academic appointment type:

Adjunct _____

Term _____

Tenure earning _____

Tenure _____

Other _____

37. Please indicate your current academic rank:

Instructor _____

Assistant Professor _____

Associate Professor _____

Professor _____

Other _____

38. Please identify the highest degree that you hold:

Bachelor's _____

Master's _____

Doctorate _____

(Respondents with doctorates go to 39. All others skip to 40.)

39. Please indicate type of doctorate and year obtained.

Ph.D in Nursing _____

Ph.D. _____

Ed.D _____

ND _____

Other _____

Year obtained _____

40. How many years of experience do you have teaching nursing courses (clinical and/or lecture)?

41. How many years of experience do you have teaching lecture courses?

42. What is your specialty area? (Please check all that apply):

Maternal/Newborn _____
Pediatric _____
Adult/Medical Surgical _____
Mental Health _____
Community Health _____
Nursing Administration _____
Nursing Research _____
Nursing Informatics _____
Other _____

43. Have you ever taught an entire course online?

Yes _____

No _____

If yes, approximately how many courses?

44. Have you ever taught portions of a course online?

Yes _____

No _____

45. Do you have a degree in education?

Yes _____

No _____

(Participants answering “yes” skip to question 48; all others proceed to question 46)

46. Have you ever taken a course that focused on skills, techniques, problems, and/or preparation for teaching?

Yes _____

No _____

If yes, approximately how many courses? _____

47. Have you ever taken a seminar in teaching that focused on skills, techniques, problems and/or preparation for teaching?

Yes _____

No _____

If yes, approximately how many seminars? _____

48. Have you ever had a course that focused on skills, techniques, problems and/or preparations for online teaching?

Yes _____

No _____

If yes, how many courses? _____

(Participants answering “yes” directed to question 49; all others go to question 50)

49. To what extent to you agree that courses adequately prepare you in the skills needed for online teaching?

Strongly	Slightly	Neutral	Agree	Strongly
Disagree	Disagree			Agree
1	2	3	4	5

50. Have you ever taken a seminar in teaching that focused on skills, techniques, problems, and/or preparation for online teaching?

Yes ____

No ____

If yes, how many seminars? _____

(Participants answering "yes" directed to question 51; all others go to question 52)

51. To what extent do you agree that seminars adequately prepare you in the skills needed for online teaching?

Strongly Disagree	Slightly Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

52. Have you ever met formally on a regular basis with a faculty person (e.g. mentor or peer support person) during an online teaching experience to discuss the skills, techniques, problems, and/or preparation for online teaching?

Yes ____

No ____

If yes, approximately how many formal meetings? _____

(Participants answering "yes" directed to question 53; all others go to question 54)

53. To what extent do you agree that formal meetings with a faculty person adequately prepare you in the skills needed for online teaching?

Strongly Disagree	Slightly Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

54. Have you ever met formally with an instructional support expert during an online teaching experience to discuss the skills, techniques, problems, and/or preparation for online teaching?

Yes ____

No ____

If yes, approximately how many formal meetings? _____

(Participants answering "yes" directed to question 55; all others go to question 56)

55. To what extent do you agree that instructional support meetings adequately prepare you in the skills needed for online teaching?

Strongly Disagree	Slightly Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

56. Have you ever been given release time for developing an online course?

Yes ____

No ____

If yes, approximately how many clock hours per course? _____

57. To what extent do you agree that release time is necessary for developing an online course?

Strongly Disagree	Slightly Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

58. Please feel free to type in any other comments related to your experiences or perceptions of teaching nursing courses online.

59. Please type in a contact email address if you wish to be placed in a drawing for one of six \$50.00 gift certificates.

60. Please type in a contact email address if you wish to have a copy of the summarized results from this survey.

Thank you for your participation in this survey!

Directions for Scoring the Educators' Sense of Online Teaching Efficacy Scale (Questions 1-32)

Scoring: Responses vary along a nine-point scale defined by the categories “Nothing”, “Very little”, “Some Influence”, “Quite A Bit”, and “A Great Deal.” (1 through 9 respectively). The higher the cumulative score on the scale, the greater sense of efficacy for that aspect of online teaching. Calculating the means of the subscales and add these means to find an overall online teaching efficacy score between 4 through 36. Higher scores indicate greater overall teachers' sense of efficacy for online teaching.

Subscale Scores: To determine the *Efficacy in Online Student Engagement*, *Efficacy in Online Instructional Practices*, *Efficacy in Online Classroom Management*, and *Efficacy in Use of Computers* subscale scores:

Efficacy in Student Engagement:

Add Score from Items: $1 + 2 + 4 + 6 + 9 + 12 + 14 + 22 =$

Total Score divided by 8 to get mean score

Efficacy in Instructional Strategies:

Add Score from Items: $7 + 10 + 11 + 17 + 18 + 20 + 23 + 24 =$

Total Score divided by 8 to get mean score

Efficacy in Classroom Management:

Add Score from Items: $3 + 5 + 8 + 13 + 15 + 16 + 19 + 21 =$

Total Score divided by 8 to get mean score

Efficacy in Use of Computers:

Add Score from Items: $25 + 26 + 27 + 28 + 29 + 30 + 31 + 32 =$

Total Score divided by 8 to get mean score

APPENDIX F

INSTRUCTOR PRE- AND POST- SURVEY INSTRUMENT

1. Sense of Efficacy for Online Teaching Scale (the Michigan Nurse Educator Sense of Efficacy for Online Teaching Scale [MNESEOT]; Robinia, 2008).

This survey was revised from the Teacher's Sense of Efficacy Teaching Scale (Tschannen-Moran and Hoy, 2001). In adapted form as used in this study, referred to as the Educator Sense of Efficacy for Online Teaching Scale ("ESEOT").

2. Collective Teacher Beliefs Tool (Tschannen-Moran, n.d.)

The Collective Teacher Beliefs Tool survey is administered both pre- and post-intervention, along with the ESEOT survey. A copy of this scale can be found at <http://wmpeople.wm.edu/asset/index/mxtsch/ctb>

Six Instructional Strategies Questions Only:

1. How much can teachers in your school do to produce meaningful student learning?
2. How much can your school do to get students to believe they can do well in schoolwork?
3. How much can teachers in your school do to help students master complex content?
4. How much can teachers in your school do to promote deep understanding of academic concepts?
5. How much can teachers in your school do to help students think critically?

6. How much can your school do to foster student creativity?

- Source: <http://wmpeople.wm.edu/asset/index/mxtsch/ctb>

The following questions were added to the pre-intervention survey:

(1) To measure self-efficacy: “I am confident in my ability to provide personalized, substantive, and detailed feedback to each student in my course, so that each student receives forward-focused and timely feedback that they can use to improve their work going forward.”

(based on the same Confidence Scale response scale used in the pre-survey)

(2) To measure likelihood of use and implementation: “Which of the following statements best describes the likelihood that you will use a comment bank when grading?”

1: I already use an original comment bank when grading.

2: I already use a shared comment bank when grading.

3: I would like to use a comment bank, if it has the content I need.

4: I do not know if I will have the opportunity to use a comment bank.

5: I do not think a comment bank will help me with my grading.

6: I have never considered using a comment bank to help me with my grading.

Please explain: _____

The following questions were added to the Post-Intervention Survey:

(1) To measure self-efficacy: “I am confident in my ability to provide personalized, substantive, and detailed feedback to each student in my course, so that each

student receives forward-focused and timely feedback that they can use to improve their work going forward.”

(based on the same Confidence Scale response scale used in the post survey)

- (2) To measure likelihood of use and implementation: “Which of the following statements best describes the likelihood that you will use the feedback comment bank shared in conjunction with this research study when grading?”

1: I have already used the feedback comment bank when grading.

2: I intend to use the feedback comment bank for future grading.

3: I would like to use the feedback comment bank, but it does not have the content I need.

4: I don’t know if I will have the opportunity to use the feedback comment bank.

5: I don’t think the feedback comment bank will help me with my grading.

Please explain: _____

Open-Ended Questions (Post-Intervention Survey Only):

- (1) How did you use the feedback comment bank throughout the session? Why?
- (2) Tell me about your impressions of the feedback comment bank?
- (3) How do you feel about the grading process when using the feedback comment bank?
- (4) Do you consider the feedback comment bank a useful tool when providing grading feedback on discussion boards? How? Why?
- (5) Do you consider the feedback comment bank a useful tool when providing grading feedback on assignments involving case law? How? Why?

Additional closed ended questions (Post-Intervention Survey Only)

Approximately how much time did you spend interacting with the feedback comment bank?

- a. Used it early in the course but then stopped using it during Week ____
- b. Started using it in Week ____ of the course
- c. Used it intermittently throughout the course
- d. Used it consistently throughout the course

Instructor Demographic Questions:

1. In addition to your work at the site university, do you work for any additional institutions? If so, what type of additional institution do you work for?

Community College _____

4-year College or University _____

2. Please indicate your gender: _____

3. What was your age on your last birthday? _____

4. Please identify your current academic appointment type at the site university:

Adjunct _____

Full-Time _____

Other _____

5. Please identify the highest degree that you hold:

Bachelor's _____

Master's _____

Doctorate _____

6. Please indicate type of doctorate and year obtained.

Ph.D _____

Ed.D _____

Other _____

Year obtained _____

7. What degree program or department do you teach for?

8. Which courses do you most often teach?

9. How many times have you instructed your current course?

10. How long have you been teaching online courses?

1. Never
2. First course
3. Less than six months
4. Six months to less than (or equal to) one year
5. More than one year and less than (or equal to) two years
6. More than two years

11. How many online courses have you taught overall?

7. 0-2 3-5 5-10 > 10

12. How many online courses have you taught at this university?

8. 0-2 3-5 5-10 > 10

13. I teach _____ students.

- Undergraduate
- Graduate
- Undergraduate and graduate

14. Employment, in addition to your teaching responsibility:

- Full Time
- Part Time
- None

15. Do you have a degree in education?

Yes ____

No ____

Pre-Intervention Survey Link: <https://forms.gle/SfgTcD4mwamkpVFo9>

Post-Intervention Survey Link: <https://forms.gle/iDXxTQifTLtTvamA7>

APPENDIX G

EDUCATORS SENSE OF EFFICACY FOR ONLINE TEACHING SCALE – ESEOT

Educators Sense of Efficacy for Online Teaching Scale – ESEOT

Adapted from Michigan Nurse Educator Sense of Efficacy for Online Teaching Scale” - “MNESEOT” (Robinia, 2008) and the Teachers’ Sense of Efficacy Teaching Scale (Tschannen-Moran and Hoy; 2001)

Directions:

You are invited to participate in this study because the institution at which you are employed has you on record as teaching an online course during the Fall 2020 term.

You meet the parameters of the sample set for this study if you are indeed teaching an online course that using a learning management system to provide instruction, actively engage with students, and provide student feedback during the Fall 2020 term.

This questionnaire is designed to help us gain a better understanding of the current self-perceptions online educators hold regarding their abilities to successfully teach in online environments.

Perceptions are sought from educators with little or no online teaching experience and educators having some or extensive online teaching experience.

Please indicate your opinion about each of the statements below. Your answers are confidential.

Questions 1-32 are concerned with understanding how online educators judge their current capabilities for teaching online courses. Even if you have little or no experience with online teaching, please try to answer each question.

A helpful prefix to each answer is, “I can do....”

1. How much can you do to help your students think critically in an online class?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

2. How much can you do to get through to disengaged students in an online class?
(e.g. passive learners who might lurk online, but fail to actively contribute to their own learning.)

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

3. How much can you do to control disruptive behavior (e.g. disrespectful posting or failure to adhere to outline policies for posting) in an online environment?)

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

4. How much can you do to motivate students who show low interest in online work?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

5. To what extent can you make your expectations clear about student behavior in an online class?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

6. How much can you do to get students to believe that they can do well in an online class?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

7. How well can you respond to difficult questions from online students?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

8. How well can you establish routines (e.g. facilitate or moderate student participation) in coursework to keep online activities running smoothly?)

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

9. How much can you do to help online students' value learning?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

10. How much can you gauge student comprehension of what you have taught in an online course?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

11. How well can you craft questions or assignments that require students to think by relating ideas to previous knowledge and experience?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

12. How much can you do to foster individual student creativity in an online course?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

13. How much can you do to get students to follow the established rules for assignments and deadlines during an online class?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

14. How much can you do to improve the understanding of a student who is failing in an online class?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

15. How much can you do to control students dominating online discussions?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

16. How well can you establish an online course (e.g. convey expectations; standards; course rules) with each group of students?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

17. How much can you do to adjust your online lessons for different learning styles?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

18. How much can you do to use a variety of assessment strategies for an online course?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

19. How well can you develop an online course that facilitates student responsibility for online learning?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

20. To what extent can you provide an alternative explanation or example when students in an online class seem to be confused?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

21. How well can you respond to defiant students in an online setting?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

22. How well can you structure an online course that facilitates collaborative learning?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

23. How well can you structure an online course that provides good learning experiences for students?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

24. How well can you provide appropriate challenges for very capable students in an online environment?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

25. To what extent can you use knowledge of copyright law to provide resources for online students?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

26. How well can you navigate the technical infrastructure at your institution to successfully create an online course?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

27. How well can you navigate the technical infrastructure at your institution to successfully teach an established online course?

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

28. To what extent can you use asynchronous discussions to maximize interactions between students in an online course? (Asynchronous means not online at the same time)

Nothing Very Little Some Quite a Bit A Great Deal

1 2 3 4 5 6 7 8 9

29. To what extent can you use synchronous discussions (e.g. same time chat rooms) to maximize interaction between students in an online course?

Nothing			Very Little				Some		Quite a Bit	A Great Deal
1	2	3	4	5	6	7	8	9		

30. How well can you use computers for word processing, internet searching and e-mail communication?

Nothing			Very Little				Some		Quite a Bit	A Great Deal
1	2	3	4	5	6	7	8	9		

31. To what extent does your comfort level with computers facilitate participation in online teaching?

Nothing			Very Little				Some		Quite a Bit	A Great Deal
1	2	3	4	5	6	7	8	9		

32. How well can you navigate the internet to provide links and resources to students in an online course?

Nothing			Very Little				Some		Quite a Bit	A Great Deal
1	2	3	4	5	6	7	8	9		

Hang in there - you have completed over 50% of the survey! Thank you for your participation!

The next section will ask for background information from participants.
All information collected is confidential.

You will be given an opportunity to provide a contact email if you wish for a copy of the summarized results from this survey.

Background Information Section

33. What type of institution do you work for?

Community College _____
4-year College or University _____

34. Please indicate your gender:

Male _____
Female _____

35. What was your age on your last birthday? _____

36. Please identify your current academic appointment type:

Adjunct _____

Term _____

Tenure earning _____

Tenure _____

Other _____

37. Please indicate your current academic rank:

Instructor _____

Assistant Professor _____

Associate Professor _____

Professor _____

Other _____

38. Please identify the highest degree that you hold:

Bachelor's _____

Master's _____

Doctorate _____

(Respondents with doctorates go to 39. All others skip to 40.)

39. Please indicate type of doctorate and year obtained.

Ph.D. _____

Ed.D. _____

Other _____

Year obtained _____

40. How many years of experience do you have teaching online courses?

41. Approximately how many courses have you taught entirely online?

42. Approximately how many courses have to taught partially online?

43. Do you have a degree in education?

Yes _____

No _____

(Participants answering "yes" skip to question 48; all others proceed to question 46)

44. Have you ever taken a course that focused on skills, techniques, problems, and/or preparation for teaching?

Yes _____

No _____

If yes, approximately how many courses? _____

45. Have you ever taken a seminar in teaching that focused on skills, techniques, problems and/or preparation for teaching?

Yes ____

No ____

If yes, approximately how many seminars? _____

46. Have you ever had a course that focused on skills, techniques, problems and/or preparations for online teaching?

Yes ____

No ____

If yes, how many courses? _____

(Participants answering “yes” directed to question 49; all others go to question 50)

47. To what extent to you agree that courses adequately prepare you in the skills needed for online teaching?

Strongly Disagree	Slightly Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

48. Have you ever taken a seminar in teaching that focused on skills, techniques, problems, and/or preparation for online teaching?

Yes ____

No ____

If yes, how many seminars? _____

(Participants answering “yes” directed to question 51; all others go to question 52)

49. To what extent to you agree that seminars adequately prepare you in the skills needed for online teaching?

Strongly Disagree	Slightly Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

50. Have you ever met formally on a regular basis with a faculty person (e.g. mentor or peer support person) during an online teaching experience to discuss the skills, techniques, problems, and/or preparation for online teaching?

Yes ____

No ____

If yes, approximately how many formal meetings? _____

(Participants answering “yes” directed to question 53, all others go to question 54)

51. To what extent do you agree that formal meetings with a faculty person adequately prepare you in the skills needed for online teaching?

Strongly Disagree	Slightly Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

52. Have you ever met formally with an instructional support expert during an online teaching experience to discuss the skills, techniques, problems, and/or preparation for online teaching?

Yes ____

No ____

If yes, approximately how many formal meetings? ____

(Participants answering “yes” directed to question 55; all others go to question 56)

53. To what extent do you agree that instructional support meetings adequately prepare you in the skills needed for online teaching?

Strongly Disagree	Slightly Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

54. Have you ever been given release time for developing an online course?

Yes ____

No ____

If yes, approximately how many clock hours per course? ____

55. To what extent do you agree that release time is necessary for developing an online course?

Strongly Disagree	Slightly Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

56. Please feel free to type in any other comments related to your experiences or perceptions of teaching courses online.

57. Please type in a contact email address if you wish to have a copy of the summarized results from this survey.

Thank you for your participation in this survey!

Directions for Scoring the Educators' Sense of Online Teaching Efficacy Scale
(Questions 1-32)

Scoring: Responses vary along a nine-point scale defined by the categories “Nothing”, “Very little”, “Some Influence”, “Quite A Bit”, and “A Great Deal.” (1 through 9 respectively). The higher the cumulative score on the scale, the greater sense of efficacy for that aspect of online teaching. Calculating the means of the subscales and add these means to find an overall online teaching efficacy score between 4 through 36. Higher scores indicate greater overall teachers' sense of efficacy for online teaching.

Subscale Scores: To determine the *Efficacy in Online Student Engagement*, *Efficacy in Online Instructional Practices*, *Efficacy in Online Classroom Management*, and *Efficacy in Use of Computers* subscale scores:

Efficacy in Student Engagement:

Add Score from Items: $1 + 2 + 4 + 6 + 9 + 12 + 14 + 22 =$
Total Score divided by 8 to get mean score

Efficacy in Instructional Strategies:

Add Score from Items: $7 + 10 + 11 + 17 + 18 + 20 + 23 + 24 =$
Total Score divided by 8 to get mean score

Efficacy in Classroom Management:

Add Score from Items: $3 + 5 + 8 + 13 + 15 + 16 + 19 + 21 =$
Total Score divided by 8 to get mean score

Efficacy in Use of Computers:

Add Score from Items: $25 + 26 + 27 + 28 + 29 + 30 + 31 + 32 =$
Total Score divided by 8 to get mean score

APPENDIX H

INSTRUCTOR INFORMAL INTERVIEW QUESTIONS

- a. What do you believe about grading feedback and its purpose? Why?
- b. What do you believe about your role in providing grading feedback? Why?
- c. How do you typically prepare for grading assignments? Discussion boards?
- d. How have your views of the feedback grading process changed as a result of participation in this study and access to the comment bank?
- e. Have your views on your ability to improve your grading feedback changed as a result of participation in this study and access to the comment bank? If so, how?
- f. Have you learned anything from participating in this study? Please explain.
- g. What is the most important thing you learned from participating in this study?
- h. How has access to the comment bank impacted your confidence in your ability to provide quality grading feedback?
- i. How has access to the comment bank impacted the type of feedback (amount, content, breadth, range of contents, tone) you provide?
- j. What part of the comment bank is most helpful/useful? Why?
- k. Have you contributed to the comment bank? Will you? How?
- l. Can you think of any downsides to the comment bank? Why?
- m. Is there anything else you'd like to share

APPENDIX I

PERMISSIONS TO USE SURVEY INSTRUMENTS

MNSEOT

Kristi Robinia <krobinia@nmu.edu>
Mon 2/10/2020 3:32 PM

FinaltoolMNSEOT.docx
20 KB

Dear Jennifer:

If you find the tool useful, please feel free to use and modify it for your purposes. If you end up using it and remember, I would love to hear your results. Good luck with your research!

Kristi Robinia PhD, RN
Associate Dean and Director | School of Nursing
Northern Michigan University
906-227-2042
1401 Presque Isle Ave, Marquette, MI 49855

*Located on the beautiful shores of Lake Superior upon the ancestral homelands of the Anishinaabeg

Collective Teacher Efficacy Scale

February 11, 2020

Jennifer,

You have my permission to use the Collective Teacher Efficacy Scale that Dr. Barr and I developed.

Please use the following citation:

Tschannen-Moran, M., & Barr, M. (2004). Fostering Student Learning: The Relationship of Collective Teacher Efficacy and Student Achievement. *Leadership and Policy in Schools*, 3(3), 189–209.

You can find each of these measure, as well as scoring directions for each, on my web site at <http://wmpeople.wm.edu/site/page/mxtsch>.

I will also attach directions you can follow to access my password protected web site, where you can find the supporting references for this measure as well as other articles I have written on this and related topics.

All the best, Megan Tschannen-Moran William & Mary School of Education

APPENDIX J

EMERGING THEMES FROM INDIVIDUAL QUALITATIVE DATA COLLECTION INSTRUMENTS

Themes from Post-Intervention Survey Open-Ended Responses. The researcher examined the qualitative data collected from the Post-Intervention Surveys for emerging themes. Applying an inductive analysis, the following themes emerged:

- Appreciation, Feelings of Support
- Expanded Vision of Feedback
- Utility
- Efficiencies
- More Positive Feelings
- Mitigation of Inconsistency
- More Personalization
- Desire for Collaboration and Professional Learning

Themes from Post-Webinar Survey Open-Ended Responses. The researcher examined the qualitative data collected from the Post-Webinar #1, #2, and #3 Surveys for emerging themes. Applying an inductive analysis, the following themes emerged:

- Faculty Appreciation, Feelings of Support
- Instructors Need for Support, Tools
- Instructors Feel Heard, Iterative Changes Provide Validity
- Desire for Collaboration, Professional Learning

- Student Need for Support
- Challenges Getting Students to Read Feedback
- Expanded Vision of Feedback
- Enhanced Appreciation for Complexity and Importance of Feedback
- Utility
- Efficiencies
- More Positive Feelings Associated with the Feedback Process
- Increased Personalization

Themes from Document Review. Analysis of participant and study-generated documents, including suggestion surveys available on the intervention's home page, also revealed consistent themes. Applying an inductive analysis, the following themes emerged:

- Instructors Appreciate, Desire, and Need Support
- Appreciation for Iterative Updates
- Empowerment and Value in Collaboration
- Expanded Visions of Feedback
- Limited Feedback Review on the Part of Students
- Efficiencies and Utility for Fundamental Skills and Associated Feedback

Themes from Collaborations and Shared Suggestions. Applying an inductive analysis, the following themes emerged:

- Appreciation for Additional Instructor Support and Iterative Updates
- Desire for Additional Instructor Support
- Struggles Getting Students to Read Feedback

Themes from Informal Conversations and Interviews. Applying an inductive analysis, the following themes emerged:

- Reduction in Negative Feelings/Increase in Positive Feelings
- Enhanced Personalization
- Instructor Voice and Validation
- Efficiencies

APPENDIX K

INTERVENTION RESOURCES

The Feedback Bank: <https://www.thefeedbackbank.com/>

Image Gallery: <https://www.thefeedbackbank.com/#images>

Discussion Board Narrative Feedback Generator:

<https://www.thefeedbackbank.com/#generator>

Global Search: <https://www.thefeedbackbank.com/#search>

Chrome Extension: [https://chrome.google.com/webstore/detail/feedback-](https://chrome.google.com/webstore/detail/feedback-finder/keljfalljoncbahaaibdjdbbfffhgqip)

[finder/keljfalljoncbahaaibdjdbbfffhgqip](https://chrome.google.com/webstore/detail/feedback-finder/keljfalljoncbahaaibdjdbbfffhgqip)

The Feedback Bank, YouTube Playlist:

<https://www.youtube.com/playlist?list=PL7ChuqmylIII1BK2e87ZTIJQd-RPdQuuik>